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- 1 {York Stenographic Services, Inc.}
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- 4 THE FISCAL YEAR 2015 U.S. DEPARTMENT OF ENERGY BUDGET
- 5 THURSDAY, APRIL 3, 2014
- 6 House of Representatives,
- 7 Subcommittee on Energy and Power
- 8 Committee on Energy and Commerce
- 9 Washington, D.C.

- The subcommittee met, pursuant to call, at 10:06 a.m.,
- 11 in Room 2123 of the Rayburn House Office Building, Hon. Ed
- 12 Whitfield [Chairman of the Subcommittee] presiding.
- 13 Members present: Representatives Whitfield, Scalise,
- 14 Hall, Shimkus, Terry, Burgess, Latta, Cassidy, Olson,
- 15 McKinley, Gardner, Pompeo, Kinzinger, Griffith, Barton, Upton
- 16 (ex officio), Rush, McNerney, Tonko, Engel, Green, Capps,
- 17 Doyle, Barrow, Matsui, Christensen, Waxman (ex officio), and

- 18 Johnson.
- 19 Staff present: Nick Abraham, Legislative Clerk; Gary
- 20 Andres, Staff Director; Charlotte Baker, Deputy
- 21 Communications Director; Mike Bloomquist, General Counsel;
- 22 Sean Bonyun, Communications Director; Matt Bravo,
- 23 Professional Staff Member; Allison Busbee, Policy
- 24 Coordinator, Energy & Power; Annie Caputo, Professional Staff
- 25 Member; Patrick Currier, Counsel, Energy & Power; Tom
- 26 Hassenboehler; Chief Counsel, Energy & Power; Jason Knox,
- 27 Counsel, Energy & Power; Brandon Mooney, Professional Staff
- 28 Member; Mary Neumayr, Senior Energy Counsel; Peter Spencer,
- 29 Professional Staff Member, Oversight; Tom Wilbur, Digital
- 30 Media Advisor; Jeff Baran, Democratic Senior Counsel; Greq
- 31 Dotson, Democratic Staff Director, Energy and Environment;
- 32 Caitlin Haberman, Democratic Policy Analyst; and Bruce Ho,
- 33 Democratic Counsel.

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34 Mr. {Whitfield.} I would like to call the hearing to 35 order this morning. And today, we are going to be looking at the fiscal year 2015 budget for the United States Department 36 37 of Energy. And of course, we are delighted that Secretary 38 Moniz is with us this morning. I know he has been very busy 39 on the Hill and the Senate side as well. And we really look 40 forward to his testimony today and to the opportunity to ask 41 questions regarding next year's Department of Energy's budget 42 request. 43 At this time, I would like to recognize myself for 5 44 minutes for an opening statement. DOE of course if tasked 45 with developing and implementing a coordinated national 46 energy policy, one that should further an all of the above 47 energy strategy. It should also be fostering private sector 48 competition and innovation of advanced energy technologies. 49 And national energy policy should also continue to support 50 job creation in our manufacturing renaissance by providing 51 regulatory certainty rather than overreaching regulations so 52 that we can maintain access to affordable, abundant and 53 reliable energy supplies. 54 I noticed that the DOE fiscal year 2015 budget request 55 9.8 billion dollars for DOE Science and Energy programs that

DOE states will play a key role in achieving the President's

- 57 climate action plan. In other words, over a third of the
- 58 entire 28 billion dollar budget is being allocated to the
- 59 President's climate agenda. This budget affirms the DOE is
- 60 putting the President's climate change agenda ahead of the
- 61 interest of a balanced national energy policy. Now, we can
- 62 debate that, but it is quite clear that the President's
- 63 climate change agenda is right at the top of the mission of
- 64 the DOE at this time. This mission is further evidenced by
- 65 the fact that the DOE's budget once again overwhelmingly
- 66 favors the Office of Energy Efficiency and Renewable Energy,
- 67 which houses all of the President's favorite green energy
- 68 programs. And in fact, the 2.3 billion requests there is
- 69 more than the combined budget requests for the Offices of
- 70 Electricity, Fossil Energy, Nuclear Energy and ARPA-E. In my
- 71 humble opinion, we have seen the Obama Administration waste
- 72 too much money on green energy projects that have failed.
- 73 Many have gone into bankruptcy at the expense to the
- 74 taxpayer.
- Another issue that is of concern to me and many others
- 76 in the proposed is the substantially reduced funding for the
- 77 mixed oxide fuel fabrication facility, MOX, currently under
- 78 construction at Savannah River Site in South Carolina. In
- 79 the case of the MOX plant, DOE has decided to abandon
- 80 construction of the facility being built to eliminate 34 tons

- 81 of surplus weapons plutonium, a project that was initiated in
- 82 the Clinton Administration. At this point, 4 billion dollars
- 83 has already been spent, and the facility is 60 percent
- 84 complete. Yet, the Department has decided to shut down
- 85 construction. And it appears, without any record of decision
- 86 or any proposed alternative, or any analysis of the
- 87 ramifications. Now, maybe they are there, but maybe we just
- 88 haven't seen them yet. Congress appropriated funds for the
- 89 construction. But it is my understanding that DOE does
- 90 intend to use those funds instead to shut down the project,
- 91 resulting in 1,800 people at risk of being laid off at their
- 92 job. And it is disturbing because of what had happened at
- 93 Yucca Mountain; the money that was spent at Yucca Mountain,
- 94 that was stopped, the lawsuits that were filed as a result of
- 95 that, and the liability of the federal government under those
- 96 lawsuits. People who are concerned about our debt are
- 97 genuinely concerned about wasting that amount of money.
- 98 I want to thank Secretary Moniz for appearing with us
- 99 today on this budget. And as I said in the beginning, he has
- 100 been a real energetic Secretary of Energy. He is willing to
- 101 engage on these issues at any point. And it is good to have
- 102 open discussion with him. And I want to commend him for
- 103 that. We look forward to hearing his testimony and asking
- 104 him question about the budget. And at this time, I would

- 105 like to recognize the gentleman from Illinois, Mr. Rush, for
- 106 his 5 minute opening statement.
- 107 [The prepared statement of Mr. Whitfield follows:]
- 108 \*\*\*\*\*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*\*\*\*\*

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- 109 Mr. {Rush.} I want to thank you, Mr. Chairman. And I
- 110 want to thank you, Secretary Moniz, for being here today to
- 111 discuss DOE's fiscal year 2015 budget.
- Secretary Moniz, I would like to commend you for
- 113 establishing the minority's and energy's initiative at DOE.
- 114 Following discussions where I express my strong and
- 115 overriding desire to increase minority participation and
- 116 involvement within all sectors of the energy industry. While
- 117 I believe that this is a first--a good first step, I have
- 118 some serious concerns regarding the amount of resources the
- 119 Agency is actually investing in this initiative, as evidenced
- 120 by your own budget proposal.
- Mr. Secretary, to me, DOE's budget is a moral statement
- of principles and a covenant with the American people. Mr.
- 123 Secretary, when I speak to my constituents about this new
- 124 initiative, one of the very first questions that they want to
- 125 know is how committed is DOE to this program, and how much of
- 126 the Department's vast resources is the Agency willing to
- 127 invest to ensure that this initiative achieves overwhelming
- 128 success?
- 129 Mr. Secretary, I am sure that you understand that in
- 130 minority communities around the country, there is always
- 131 skepticism when new programs or new policies are announced

132 supposing to help increase opportunity when the resources to 133 help make them successful are not included. So when members 134 who represent these communities, such as myself and many, many others see a lack of investment in programs designed to 135 136 assist minorities, it is our duty to hold the Administration 137 and the Agencies responsible in order to rectify the 138 situation. For instance, Mr. Secretary, I am not impressed 139 with the investment in the minority and energy initiative as 140 it currently stands. And I want to work with you to make 141 sure that we are not shortchanging these communities who are 142 looking for opportunities to improve their livelihood, as so 143 many others have already been afforded. 144 And, Mr. Secretary, we know that these opportunities are 145 out there. In fact, we have come a long way since I first 146 inquired--first started inquiring into the levels of 147 participation of minorities in all different sectors of the 148 energy industry. And now we have the Administration, the 149 industry, schools, universities, and all--they are all 150 talking about the concept of increasing the number of 151 minorities in energy. As you know, I have a Bill that will 152 provide a pass way to energy jobs by reaching out to minority 153 communities and informing them of mostly opportunities available within the energy sector, as well as the skills, 154

training and certifications needed to take advantage of these

- 156 opportunities. My office is actively reaching out to members
- 157 on both sides of the aisle who understand the need for better
- 158 preparing all Americans for energy jobs in the present and
- 159 the future. And I will continue to work with any and all
- 160 stakeholders who are of the same mind.
- This is my hope, Mr. Chairman, that we can hold a
- 162 hearing on this very important topic of minority
- 163 participation in the energy sector in order to make up for
- 164 the shortfall of workers who will be retiring and exiting the
- 165 workforce, leaving behind a shortage of talented and skilled
- 166 workers in their wing. And the fact of the matter is that
- 167 increasing the number of skilled and trained workers will in
- 168 fact be a win for the industry, a win for the minority
- 169 communities and a win for the entire American economy as a
- 170 whole. So I look forward to working with you, Mr. Secretary,
- 171 as well as members on both sides of the aisle to make this a
- 172 real commitment on the part of the Administration and--
- 173 With that, I yield back.
- [The prepared statement of Mr. Rush follows:]
- 175 \*\*\*\*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*\*\*\*\*

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176 Mr. {Whitfield.} The gentleman yields back. At this 177 time, I recognize the Chairman of the Full Committee, Mr. 178 Upton, for 5 minutes. 179 The {Chairman.} Well, Mr. Secretary, welcome back to 180 the Committee. I for one do appreciate your thoughtful 181 insight and friendship. And when I look at DOE's current 182 energy policies, as well as its budget for fiscal year 2015, 183 I must confess that I see an agency that is still struggling 184 a bit to keep up with a changing energy landscape. The old 185 assumptions of energy scarcity are somewhat pervasive, and it 186 is time for DOE to adapt. 187 It does appear that DOE is ultra-cautious approach to 188 proving LNG Export's--you would expect us to say this today--189 to non-free trade agreement trade agreement countries does 190 not reflect our newfound age of energy abundance. 191 Projections from the EIA, as well as DOE's own analysis, 192 confirm that we have more than enough natural gas to meet 193 domestic needs affordably while supporting export markets. 194 And this surplus situation is likely to last for many 195 The ramifications of DOE's policy on exports can be decades. 196 measured not only in the thousands of unrealized jobs that 197 could be constructed at LNG Export facilities and producing

the extra natural gas for export, but also in the billions in

199 revenues that could be flowing into the country and boosting 200 the overall economy. Geo-political opportunities are also at 201 The mere signal that the U.S. is serious about 202 entering export markets would have an immediate effect on our 203 allies in Eastern Europe who are currently dependent on that-204 -on Russia for natural gas. In fact, reports earlier this 205 week show that Russia upped the bill by as much as 45 to 50 206 percent on our friends in Ukraine. That is why I and so many 207 others support Cory Gardner's Bill, H.R. 6, Bipartisan 208 Legislation, The Domestic Prosperity and Global Freedom Act, 209 which would help clear the backlog of export applications 210 currently at DOE. 211 LNG export facilities are just one part of the larger 212 infrastructure picture to make full use of our newfound 213 energy advantage in H.R. 6, is one Bill that facilities 214 building these--this architecture of abundance. We are in 215 the midst of a continued and comprehensive effort to review 216 and update energy laws, many of which were written in a time 217 of Jimmy Carter Era price controls and scarcity. And whether 218 it is legislation to modernize and update transmission and 219 distribution infrastructure, legislation to maintain adverse 220 electricity portfolio generation with a continued role for 221 coal and nuclear renewables, or legislation seeking or ensure 222 that we have the tools in place to permit a new manufacturing

- 223 renaissance, we are building a record and exploring
- 224 opportunities at every level.
- Now, I know that DOE is beginning a similar effort to
- 226 look comprehensively at our energy infrastructure and broader
- 227 strategy through the quadrennial energy review process, and I
- 228 welcome that broad look. However, I remain skeptical of the
- 229 federal government playing venture capitalist in making other
- 230 decisions best left to the marketplace. DOE may be talking
- 231 about the energy breakthroughs of the future, but the Agency
- 232 is still trying to get there with central planning approaches
- 233 of the past. In particular, the revival of the loan
- 234 guarantee program that backs Solyndra and several other
- 235 projects that went bust is of serious concern and will no
- 236 doubt be a topic of discussion of today.
- I would like to conclude just by reminding you of DOE's
- 238 role in the federal government. Yesterday, this Subcommittee
- 239 held its EPA budget hearing. And I couldn't help but notice
- 240 the extent to which EPA sets the energy policy agenda in the
- 241 Administration, even though that Agency has no statutory
- 242 authority to do so. DOE should be the energy policy setting
- 243 body, but it seems as though it has relinquished that duty to
- 244 a degree. In past administrations, both Republican and
- 245 Democratic, DOE acted as a pro-energy counterweight to an EPA
- 246 whose tendency was to regulate every BTU that it encountered.

- 247 I know that we can restore DOE's mission to ensure a more
- 248 balanced approach to the energy policy. And I yield back the
- 249 balance of my time.
- 250 [The prepared statement of Mr. Upton follows:]
- 251 \*\*\*\*\*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*\*\*\*\*

- 252 Mr. {Whitfield.} Mr. Upton yields back the balance of
- 253 his time. At this time, I would like to recognize the
- 254 gentleman from California, Mr. Waxman, for 5 minutes.
- 255 Mr. {Waxman.} Thank you, Mr. Chairman. And, Mr.
- 256 Secretary, welcome back to our committee.
- Last week, Geochemist James Lawrence Powell published a
- 258 study documenting the scientific consensus on climate change.
- 259 Dr. Powell who, among other things, served on the National
- 260 Science Board under both Presidents Reagan and George H. W.
- 261 Bush, looked at all the peer reviewed scientific articles
- 262 published on climate change in 2013. He found over 10,000
- 263 articles that agreed that climate change is real and caused
- 264 by man. And only 2 out of more than 10,000 that rejected
- 265 human caused global warming. You can see his results on the
- 266 screen.
- [Slide].
- 268 Secretary Moniz, you may not know this, but we took a
- 269 vote on this issue earlier this year. Congresswoman
- 270 Schakowsky offered an amendment that said greenhouse gas
- 271 emissions threaten public health and welfare by disrupting
- 272 the climate. That was the statement. The Republican members
- 273 of this Committee voted unanimously to reject that amendment.
- 274 Just that statement. I have been in Congress for 40 years.

- 275 This is my last year in Congress. And I have never seen just 276 an embarrassing and dangerous disconnect between what 277 scientists say and how this Committee votes. On Monday, the 278 Intergovernmental Panel on Climate Change, or IPCC, told us 279 that climate change is happening today on ``all continents 280 across the oceans.'' The world's leading scientists explain 281 that unless we take significant steps to reduce carbon 282 pollution now, ``climate change impacts are projected to slow 283 down economic growth, make poverty reduction more difficult, 284 further erode food security, and prolong existing and create 285 new poverty traps.'' 286 The science of climate change is settled. Climate 287 change is happening. It is caused by humans. And its 288 impacts are both serious and real. And it is time for us to 289 listen to the scientists and to act. I appreciate that we 290 have a President who does listen to the scientists and is 291 acting to address climate dangers. Under his Climate Action 292 Plan, President Obama has committed to reducing our carbon 293 pollution by 17 percent by 2020 and has outlined a number of 294 steps to do so. The President has committed to bend the 295 post-2020 global admissions trajectory further still.
- The Department of Energy has a key role to play under
  the President's plan. The energy choices we make today will
  determine whether we address this threat or leave our

- 299 children and grandchildren with a climate catastrophe.
- That means, Secretary Moniz, that you have one of the
- 301 most important jobs in America. I view the paramount
- 302 responsibility of the Secretary of Energy as advancing the
- 303 nation's response to the threat of climate change. That is
- 304 your responsibility as well as EPA's. And I don't think you
- 305 ought to be fighting a turf war with them, as some of our
- 306 colleagues here suggest. Under your leadership, the
- 307 Department of Energy is working to meet the climate
- 308 challenge. DOE is developing the energy efficiency standards
- 309 we need to cut energy waste and save people money. You are
- 310 engaged in research, development, demonstration and
- 311 deployment of advanced renewable energy technologies, cleaner
- 312 vehicles, energy storage and a modern electric grid that
- 313 delivers reliable clean energy to power our homes and
- 314 businesses. And you are hard at work developing next
- 315 generation pollution control technologies for our fossil fuel
- 316 systems. These new clean energy technologies will protect
- 317 our environment, create new jobs and grow our economy.
- Mr. Secretary, the latest IPCC report confirms that we
- 319 have a choice. We could listen to the scientists and invest
- 320 in the energy technologies we need for a prosperous clean
- 321 energy future, or we could ignore the climate problem and
- 322 suffer dire consequences. Mr. Secretary, I am confident that

- 323 you will continue to help us choose the right path to a clean
- 324 energy future. I look forward to your testimony and your
- 325 continued leadership on these issues. Thank you.
- 326 [The prepared statement of Mr. Waxman follows:]
- 327 \*\*\*\*\*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*\*\*\*\*

328 Mr. {Whitfield.} The gentleman yields back the balance 329 of his time. At this time, having completed the opening 330 statements, Secretary Moniz, we are going to recognize you 331 for your 5 minute opening statement. And once again, thank 332 you for being with us.

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     ^STATEMENT OF HONORABLE ERNEST J. MONIZ, SECRETARY, U.S.
334
     DEPARTMENT OF ENERGY
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          Mr. {Moniz.} Well, thank you, Mr. Chairman. And--I
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     should say Chairman Whitfield and Upton and Rush and Waxman.
337
     Members of the Committee, I appreciate the opportunity to
     come here to discuss our budget proposal for fiscal year
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339
     2015.
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          The President I think make clear through this proposal
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     that the Department of Energy has significant
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     responsibilities in the advancing the nation's security by--
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     especially by maintaining a reliable nuclear deterrent and
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     keeping nuclear materials out of the hands of terrorists, and
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     for advancing the nation's prosperity, in particular by
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     supporting the President's all of the above approach to
347
     energy and by helping to provide the foundation for the
348
     future of advanced manufacturing in this country.
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          Mr. {Whitfield.} Mr. Secretary, if I may? I am sorry
     to interrupt you. Would you move the microphone just a
350
351
     little bit closer to you?
352
          Mr. {Moniz.} Oh, closer?
353
          Mr. {Whitfield.} Yeah.
354
          Mr. {Moniz.} Okay.
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- Mr. {Whitfield.} Thank you.
- 356 Mr. {Moniz.} Thank you. Okay. So the Department of
- 357 Energy's top line discretionary budget request is 27.9
- 358 billion, a 2.6 percent increase from fiscal year 2014. And
- 359 in this constrained budget environment, again, I think this
- 360 reflects some of the high priority missions that we have
- 361 responsibility for.
- I will discuss very briefly a few points along DOE's
- 363 three major programmatic areas as we have organized them at
- 364 the under-secretary level, science and energy, which I
- 365 understand will be the main focus of today's discussions, and
- 366 a few words about nuclear security, and management and
- 367 performance.
- 368 On science and energy, the President's all of the above
- 369 energy strategy is driving economic growth, creating jobs
- 370 while lowering carbon emissions. We are producing more gas,
- 371 more natural gas in the United States than ever before. And
- 372 for the first time in two decades, we are producing more oil
- 373 at home than we import from the rest of the world. In fact,
- 374 just yesterday, the EIA released some data showing that net
- 375 energy imports in the United States now, which is about 13
- 376 quads, is the same as in 1987, 30 years ago. So it has been
- 377 a dramatic reduction. And in fact, more than a 10 percent
- 378 reduction just from 2012 to 2013.

- We have also, at the same time, made remarkable progress
- 380 in clean and renewable energy. In the last 5 years, more
- 381 than doubled the amount of electricity from wind and solar.
- 382 At the same time, making the investments that enable coal and
- 383 nuclear power to be competitive in a clean energy economy.
- 384 We are aggressively advancing energy efficiency, bringing
- 385 economic environmental and security benefits.
- In the last few years, we have seen technologies like
- 387 LED lighting costs drops sevenfold--several fold, excuse me,
- 388 such that payback periods are now approaching one year. So--
- 389 and along with that, tens of millions of units being deployed
- in the marketplace.
- The budget request is 9.8 billion, as the Chairman said,
- 392 for the science and energy activities, an increase of 5
- 393 percent for, again, advancing the all the above energy
- 394 strategy, supporting the climate action plan, continuing the
- 395 quadrennial energy review focusing on energy infrastructure,
- 396 and maintaining global scientific leadership.
- There are significant increases in several important
- 398 applied programs. I will just say a couple words. In energy
- 399 efficiency renewable energy, a 22 percent increase is
- 400 proposed with focus areas in transportation, renewable
- 401 technology, efficiency, advanced manufacturing. Office of
- 402 electricity, significant increase to support what we all see

- 403 I think as important modernization of the grid, an
- 404 enhancement of its resiliency in response to many threats
- 405 that we are seeing. We are also building a strengthened
- 406 emergency response capability as the lead agency for energy
- 407 infrastructure under the leadership of FEMA in case of severe
- 408 events.
- 409 RPE, which takes a unique entrepreneurial approach, we
- 410 propose for a 16 percent increase, we would note that in its
- 411 relatively brief existence so far there have been 24 startups
- 412 coming out of the RPE programs, and many, many other
- 413 indicators of success. We also have created, as part of our
- 414 reorganization, the Office of Energy Policy and Systems
- 415 Analysis, mainly gathering policy elements from various
- 416 program offices, but with a particularly critical
- 417 responsibility for enhancing our analytical capacity and for
- 418 advancing the quadrennial energy review, looking at this
- 419 country's energy infrastructure challenges.
- DOE science programs really are the backbone of the
- 421 American research enterprise and the physical sciences, and
- 422 we have proposed 5.1 billion dollars for science. As one
- 423 example, in conjunction with the NNSA, our National Security
- 424 Agency, the Office of Science will lead an initiative to
- 425 develop exascale computing platforms, the next stage in a
- 426 historic DOE role for keeping this country at the leadership

- 427 edge of high performance computing. And of course, the many
- 428 facilities that science supports, light sources, spallation
- 429 neutron source, the future facility for rare isotope beams,
- 430 all sustained nearly 30,000 scientists in this country with
- 431 cutting edge activities.
- I mentioned cross cutting activities already, exascale
- 433 for example, grid, one other one, subsurface science and
- 434 engineering where we find many energy issues involve
- 435 subsurface science and engineering. We want to pull those
- 436 together, make them more coherent, involve our laboratories
- 437 as a system.
- In nuclear security, I will just end up by saying we
- 439 have asked for 11.9 billion. I would say a highpoint there
- 440 is that through an administration wide process, we have
- 441 firmly committed to the nuclear posture review approach to
- 442 our nuclear deterrent, and that is stretched out a little bit
- 443 because of budget constraints, but it is committed to as our
- 444 direction there. In management performance, just
- 445 emphasizing, and I think this Committee would agree that if--
- 446 without improving our management performance, we will not be
- 447 able to as effectively for sure execute our energy science
- 448 and security missions. So this is a brand new--a new focus
- 449 under which we have moved environmental management to be a
- 450 specific responsibility of that under-secretary.

451	I will just mention maybe from the point of view of a
452	news item again, as you know we have had an issue at WIPP,
453	our facility in New Mexico. I just wanted to say that
454	emphasize first that there is no evidence of any significant
455	exposures to people. But, obviously, we are shut down at the

- 456 moment. But yesterday, two teams did enter the caverns and
- 457 we hope to move expeditiously towards a reopening.
- With that, I just want to thank you for your time and
- 459 look forward to questions.
- [The prepared statement of Mr. Moniz follows:]

461 \*\*\*\*\*\*\*\*\*\* INSERT A \*\*\*\*\*\*\*\*\*

462 Mr. {Whitfield.} Well, thank you, Mr. Secretary. Once 463 again, we appreciate you being here. At this time, I will recognize myself for 5 minutes of questions. And while there 464 465 are many broader policy concerns that I have, I do want to 466 focus initially on the Paducah Gaseous Diffusion Plant, 467 because there is so many--it is going through a transition 468 down there. 469 And one question I would like to ask you is this--of 470 course communication between the State of Kentucky, the City 471 of Paducah and the Department of Energy is vitally important. 472 And with all the changes taking place, the Paducah site has 473 not really had a director or a lead that is really focused on 474 that one area onsite. And we have had some previous 475 discussions about this. But could you share with us this 476 morning whether or not you all do intend to appoint a person 477 that would be responsible for that site and be responsible 478 for good communication with the community and the State? 479 Mr. {Moniz.} Yes. First of all, I appreciated also 480 your intersession in helping us with those communications 481 with the City and the State. My understanding is that we are 482 in the process of hiring that person. I will--why don't I 483 get back and check exactly on the status of that and get back 484 to you promptly?

- 485 Mr. {Whitfield.} But you do feel like--
- 486 Mr. {Moniz.} We will--we do want to have a dedicated
- 487 site manager at Paducah.
- 488 Mr. {Whitfield.} Okay. Thank you, sir.
- 489 Mr. {Moniz.} Yes.
- 490 Mr. {Whitfield.} Thank you. Now, the fiscal year 2014
- 491 budget for the Paducah area, the cleanup and everything was
- 492 around 265 million dollars. And it is my understanding that
- 493 not all of that money is going to be able to be spent this
- 494 year. But it is my understanding that the Department of
- 495 Energy would have the option of directing some of that
- 496 additional money for cleanup. And as you know, with USEC
- 497 coming to an end, a lot of people are losing their jobs down
- 498 there. Could the Department of Energy--or are you all
- 499 considering funneling some of that money for additional
- 500 cleanup so that some of these people would be able to retain
- those jobs?
- 502 Mr. {Moniz.} Well, we are--Mr. Chairman, we are working
- 503 to try to speed up the contract discussions. Typically,
- 504 these large environmental management contracts, they are
- 505 complicated. They are very long-term. They have very, very
- 506 large contract amounts, are 12 to 14 months. We are hoping
- 507 to get that down a little bit shorter so that we can have
- 508 that turnover early in the fall, and we are working hard on

- 509 that. That is I think the reason why we anticipate having
- 510 some carryover funds. We are trying to exercise what we can
- 511 this year. I understand the concerns. But we will have
- 512 carryover funds for sure. So I think also in the context of
- 513 our fiscal year 2015 request, I think we will have a strong
- 514 program.
- Mr. {Whitfield.} You are referring to the IDIQ contract
- 516 that--
- Mr. {Moniz.} Yeah.
- Mr. {Whitfield.} And did I understand you to say that
- 519 in September or did you--
- 520 Mr. {Moniz.} September is--we are trying to push to get
- 521 that contract concluded.
- Mr. {Whitfield.} Okay. Well, of course, that remains a
- 523 priority for all of us involved with this issue. So we do
- 524 appreciate your focusing on it and expediting it as much as
- 525 possible.
- 526 Mr. {Moniz.} We were able to beat the schedule last
- 527 year on another issue.
- Mr. {Whitfield.} Right.
- Mr. {Moniz.} Hopefully, we can beat the schedule this
- 530 year. But we are trying.
- Mr. {Whitfield.} And also, in the fiscal year 2015,
- 532 there is talk in the budget about transitioning the facility

- 533 into a cold and dark state. And of course, we don't want it
- 534 to be a cold and dark state, because we were more interested
- 535 in decontamination and decommissioning of the facility. But
- 536 your understanding, what is the definition of a cold and dark
- 537 state for a facility like--
- 538 Mr. {Moniz.} Well, I can't say that I have, to be
- 539 honest, really focused on that. But I would say that it
- 540 means I think we need to have the facility in a stable, safe
- 541 condition without compromising the eventual D&D activities.
- Mr. {Whitfield.} Right.
- Mr. {Moniz.} Those would be the objectives, at least.
- 544 I can't say that I could describe in technical detail what it
- 545 means.
- 546 Mr. {Whitfield.} Right. But it is the goal to
- 547 decontaminate and decommission rather than--
- Mr. {Moniz.} Certainly. Oh, yes, it does. That is
- 549 certainly a requirement. Yes.
- Mr. {Whitfield.} Well, Mr. Secretary, thank you for
- 551 helping clarify some of those issues. I appreciate that very
- 552 much. And I don't know how much time you have. We may go to
- 553 a second round if you have time. But at this time, I would
- 554 like to recognize the gentleman from Illinois for 5 minutes
- 555 of questions, Mr. Rush.
- Mr. {Rush.} I want to thank you, Mr. Chairman. Mr.

- 557 Secretary, I do have a lot of questions that I want to cover.
- 558 And I know I won't have the time to do it all this morning,
- 559 so I will be submitting questions for the record. And I
- 560 would like the Agency to get back to me as promptly as
- 561 possible to an issue that I want to discuss today on both the
- 562 minorities and energy initiative and also the publicly funded
- 563 national research labs. Of the Agency's 27.9 billion dollar
- 564 budget request, what is the amount allocated to the Office of
- 565 Economic Impact and Diversity, which is the Agency primarily
- 566 responsible for enacting the Minorities and Energy Initiative
- 567 both in terms of dollars and also in terms of percentage? Do
- 568 you feel that this amount is adequately in terms of
- 569 reflecting the priorities of reaching out and engaging
- 570 minorities in the energy sector for both you and for
- 571 President Obama, and can you do more? So those are the three
- 572 questions.
- 573 Mr. {Moniz.} Well, first of all, I think the budget for
- 574 the economic development and diversity office is I believe I
- 575 is approximately 6 million dollars. In the budget--I just
- 576 want to clarify that in the budget, it shows a decrease. But
- 577 it is not actually a decrease, because two functions were
- 578 placed elsewhere. One is by law. We had to move the OSDBU
- 579 office--I forgot the name--office of small--it is a small
- 580 business office--I--the acronym, I have forgotten now what it

- 581 stands for. But by statute, it turned out we had to move
- 582 that outside and leave it as a coordinating office with the
- 583 ED office under Dot Harris. The second thing is that there
- 584 was a function placed in there, which the office was paying
- 585 for, for the department wide ombudsman, which was really
- 586 misplaced. So we put that in the management and
- 587 administration office as a better place. So the core--the
- 588 budget for that office really is not--has not been cut.
- Mr. {Rush.} So in your best estimates, the budget has
- 590 flat lined to a degree--flat line--
- Mr. {Moniz.} It is--I believe it is flat.
- Mr. {Rush.} Without increase--without an increase, is
- 593 that what you are saying?
- Mr. {Moniz.} I believe it is flat. Yeah. I think that
- 595 is correct. And if I go on to discuss the Northeastern
- 596 Energy Initiative, and I--by the way, I do want to say that,
- 597 you know, the birth of that was in a hearing here last June
- 598 when you raised the issue. I think it is off to a very, very
- 599 successful start with the ambassadors. You know that very
- 600 well, Mr. Rush. The--but for example--and this is not on our
- 601 budget. But for example, the American Petroleum Institute,
- 602 because of the initiative--and its director is one of the
- 603 ambassadors--they are having eight regional meetings to
- 604 attract minorities into the oil and gas industry workforce.

- 605 I personally went in the end of January to Hampton University
- 606 and recruited the president, Mr. Harvey, to an
- 607 ambassadorship. But--so we are promoting this I think--
- Mr. {Rush.} Mr. Secretary, can you do more?
- Mr. {Moniz.} I--we can do more. And I would be happy
- 610 to discuss with you how we could do more.
- Mr. {Rush.} All right. Moving on to the area of the
- 612 public funded national research labs. How many publicly
- 613 funded research labs are there, and are any of these labs
- 614 managed by or operated by a minority?
- Mr. {Moniz.} We have 17 national laboratories. The--
- 616 Mr. {Rush.} Are any of them operated by a minority?
- Mr. {Moniz.} Well, yeah--I mean, they are operated by
- 618 organizations. The--let me say that I am dissatisfied
- 619 frankly with the diversity in the upper-management ranks of
- 620 these laboratories. And that is something that we have taken
- 621 up with our lab policy counsels.
- Mr. {Rush.} When you--yeah, when you speak specifically
- 623 about Argonne and Fermi which are located in my home state--
- 624 Argonne and Fermi, which are located in my home state, what
- 625 are the percentage of minority engagements at Argonne and
- 626 Fermi lab?
- 627 Mr. {Moniz.} Sir, I will have to get back to you with
- 628 that for the record, because I don't know those numbers.

- 629 Mr. {Rush.} Right. Do you have--
- Mr. {Moniz.} I do know that the upper ranks of the
- 631 management -- we have inadequate representation.
- Mr. {Rush.} Do you have figures for any other of the
- other 17 labs across the country?
- Mr. {Moniz.} No, but I would be happy to get you those
- 635 demographics.
- Mr. {Rush.} Thank you very much.
- Mr. {Whitfield.} The gentleman's time has expired. At
- 638 this time, I will recognize the gentleman from Texas, Mr.
- 639 Barton, for 5 minutes.
- Mr. {Barton.} Thank you, Mr. Chairman. And thank you,
- 641 Mr. Secretary, for being here. You are the only cabinet
- 642 secretary that goes longer between haircuts than me. So I
- 643 appreciate that.
- Mr. {Moniz.} I didn't know I had to come here to get
- 645 that repeated. But anyway--
- 646 Mr. {Barton.} No. I need a haircut. So you make me
- 647 look sheared, so to speak. I know this is a budget hearing.
- 648 And I know we should be asking questions about the DOE
- 649 budget. But I want to ask you a few more questions about LNG
- 650 Exports given what has happened in the Ukraine and Crimea.
- 651 This Subcommittee has done a number of forums where we have
- 652 had almost a complete panoply of forum representatives. And

- 653 to a person, they have all said that they want the United
- 654 States to export LNG, and they want to do it sooner rather
- 655 than later. The situation in the Ukraine obviously gives
- 656 credence to that. I believe President Obama, when he was in
- 657 Europe last week or the week before last, made some comments
- 658 that said that we should do that. Now, I don't want to say
- 659 that in absolute certainty, because I don't remember exactly
- 660 what he said. Your Agency, your Department is the Department
- 661 that has to give the initial approval. You just approved one
- on I think February the 29th. So if that is possible, did we
- 663 have a February the 29th this year? Any--in any event--
- Mr. {Moniz.} It was in March.
- Mr. {Barton.} March.
- Mr. {Moniz.} March.
- Mr. {Barton.} March 29.
- Mr. {Moniz.} Yeah.
- Mr. {Barton.} I knew you would correct me. So you are
- 670 right. March. March the 24th, actually. I was looking--any
- 671 way, it is my fault. So it looks like when we read the
- 672 approval documents that they are almost verbatim. And so my
- 673 question is once you found that it is in the public interest
- 674 for one of these projects, why does it keep taking so long to
- 675 approve the next one? There are still 24 in the queue. Why
- 676 couldn't we just get a big stamp and stamp them all approved

- and get on with it?
- Mr. {Moniz.} Well, there are a number of issues there.
- 679 The--first of all, we do have these large dockets which do
- 680 have specific comments with regard to different proposals.
- 681 Secondly of course, as you know there is also the FERC
- 682 process, which goes through the NEPA process on a secondary
- 683 basis.
- Mr. {Barton.} I am aware of that.
- 685 Mr. {Moniz.} And--
- Mr. {Barton.} You don't have to worry about that.
- 687 Mr. {Moniz.} And--
- Mr. {Barton.} So that is not an excuse.
- 689 Mr. {Moniz.} Well, no. But it is a fact. And right
- 690 now, we have no proposals ready for that final declaration,
- 691 because they are still in the NEPA process. Third is that
- 692 the--
- 693 Mr. {Barton.} But why would that impact the DOE
- 694 process? I don't understand that. Somebody is getting ready
- 695 to run for President in two years, but that doesn't impact my
- 696 process of running for Congress this year. I mean, I don't
- 697 understand why DOE going through--
- 698 Mr. {Moniz.} Well--
- 699 Mr. {Barton.} I mean, FERC going through the NEPA
- 700 process makes it more difficult for you to give approval or

- 701 disapproval.
- 702 Mr. {Moniz.} But we could not--my understanding
- 703 certainly is that we cannot act on a final approval until
- 704 that other--the FERC process is complete.
- 705 Mr. {Barton.} But you can do whatever you have been
- 706 doing, this conditional approval?
- 707 Mr. {Moniz.} Yeah, so the conditional approvals, we--
- 708 Mr. {Barton.} You have done 7, I think.
- 709 Mr. {Moniz.} We do prior to the--typically prior to the
- 710 FERC process, although I might say that now I think as the
- 711 process has rolled forward, we are seeing some proposers
- 712 filing with FERC prior to getting conditional approval. So
- 713 this is an evolution that is happening that is-
- 714 Mr. {Barton.} That is great information, Mr. Secretary.
- 715 Mr. {Moniz.} Yeah.
- 716 Mr. {Barton.} But it is irrelevant to what your job is
- 717 supposed to be. You have got 24 of these. And I am not
- 718 trying to be argumentative. I happen to believe that you and
- 719 I are on the same page.
- 720 Mr. {Moniz.} Then--
- 721 Mr. {Barton.} All I want you to do is say I agree with
- 722 you, we are going to get on it, we need to do it more
- 723 quickly, you are right, Congressman.
- 724 Mr. {Moniz.} I--

- 725 Mr. {Barton.} That is all you have got to do, and we go
- 726 on to the next questioner.
- 727 Mr. {Moniz.} I agree that we are systematically working
- 728 through the applications. Right--the law requires us to do a
- 729 public interest determination. That public interest
- 730 determination has multiple features.
- 731 Mr. {Barton.} All right. My time has expired.
- 732 Mr. {Moniz.} It includes--
- 733 Mr. {Barton.} You have successfully filibustered the
- 734 question period. I want you to do me one--go back to your
- 735 office this afternoon. It is that big office in the corner
- 736 on the top floor of the Forrestal Building, unless you have
- 737 moved it.
- 738 Mr. {Moniz.} No.
- 739 Mr. {Barton.} And read the seven applications that you
- 740 have approved. And give me a report on the--any wording
- 741 differentiation in any of those seven approvals. They are
- 742 almost verbatim.
- 743 Mr. {Moniz.} I would note for example in the last
- 744 approval, the Jordan Cove, you will see a rather different
- 745 discussion of international impacts in the public interest
- 746 determination, for example.
- 747 Mr. {Whitfield.} The gentleman's time has expired. At
- 748 this time, I would like to recognize the gentleman from

- 749 California--no, have you asked some questions yet?
- 750 Mr. {Whitfield.} Where is Mr. Waxman? Who is next?

- 751 Mr. {Barton.} Go to Mr. McNerney.
- 752 Mr. {Whitfield.} At this time, I will recognize the
- 753 gentleman from California, Mr. McNerney, for 5 minutes.
- 754 Mr. {McNerney.} Thank you for that reluctance, Mr.
- 755 Chairman. Mr. Secretary, thank you for coming this morning.
- 756 And I would like to talk a little bit about fusion energy for
- 757 a few minutes, if you don't mind?
- 758 Fusion energy, as you know, consists of releasing energy
- 759 by fusing nuclei of small elements together. And fusion of--
- 760 the fuel for fusion energy would be virtually unlimited.
- 761 Radioactive waste produced by fusion reaction is less
- 762 dangerous than radioactive waste produced from nuclear power.
- 763 And fusion reactors would inherently be failsafe in their
- 764 operation. Do you agree with those statements?
- 765 Mr. {Moniz.} Well, failsafe in terms of certain kinds
- 766 of accidents. Obviously, they can have malfunctions.
- 767 Mr. {McNerney.} Right. Okay. Thank you. Mr.
- 768 Secretary, the DOE budget for fusion research is 416 million
- 769 dollars a year. Now, on the other hand, the fusion power
- 770 supporters believe that fusion power could be practical in 10
- 771 years with a 3 billion dollar investment per year. Do you
- 772 believe that that is a realistic assessment?

- 773 Mr. {Moniz.} I should probably insert at this point--so
- 774 just--I can answer that question but--
- 775 Mr. {McNerney.} Sure.
- 776 Mr. {Moniz.} I am recused from dealing with the fusion
- 777 program. So there may be some of these I will have to have
- 778 my science office get back to you. But in terms of the
- 779 statement just now in terms of a general objective, I think
- 780 the 10 year estimate would certainly be viewed as optimistic
- 781 by most scientists.
- 782 Mr. {McNerney.} Okay. Well, so how long do you think
- 783 it would take then with the 400 and--
- 784 Mr. {Moniz.} I wouldn't speculate. But for example,
- 785 what is certainly part of the public discussion, again, I
- 786 cannot make decisional statements on fusion. The--I believe,
- 787 you know, the major international project currently going on
- 788 doesn't even plan to get to ignition in, I don't know, quite
- 789 a few years from now, at least a decade. So--and that would
- 790 be many steps from that to a commercial plant.
- 791 Mr. {McNerney.} Okay. Fair enough.
- 792 Mr. {Moniz.} Yeah.
- 793 Mr. {McNerney.} Do you think it is a--that is a good
- 794 investment of American dollars in fusion research?
- 795 Mr. {Moniz.} In--as--again, as a general statement, I
- 796 think we definitely should keep investing in fusion.

- 797 Mr. {McNerney.} Okay. We have fallen behind some of
- 798 the other countries in that research area over the last
- 799 decade or so.
- 800 Mr. {Moniz.} Well, again, I think as--I am just going
- 801 to my scientific background. I would say that we remain the
- 802 leaders in many aspects of fusion. I think certainly in the
- 803 large scale modeling and simulation of plasmas, I think we
- 804 remain leaders. We are building many of the big components
- 805 in terms of big magnets--superconducting magnets. So I think
- 806 we have--we are not so far behind, I would say in terms of
- 807 our capacity. Obviously, we don't have a facility of the
- 808 scale that is being built in Europe.
- 809 Mr. {McNerney.} Okay. Well, I am going to change the
- 810 subject a little bit, if you don't mind. Last week, the
- 811 President announced an interagency methane strategy to reduce
- 812 emissions of that potent greenhouse gas. DOE will play an
- 813 important role, along with the EPA and the Department of
- 814 Interior. The strategy document states that the DOE will
- 815 sponsor roundtable discussions with stakeholders about
- 816 methane emissions. What does the DOE hope to achieve in
- 817 those roundtable discussions?
- Mr. {Moniz.} I just might add for the agencies that
- 819 U.S.--that agriculture is also a major player in that for
- 820 different sources of methane. The Department of Energy--our

- 821 focus is on data. And it is very much focused also on the
- 822 kind of midstream and downstream systems. We assembled -- we
- 823 had the first of the roundtables, multiple constituencies,
- 824 especially for that midstream and downstream, including, you
- 825 know, companies, labor, environmental groups, et cetera. The
- 826 big message for me in that meeting was the surprising degree
- 827 of agreement in terms of a path forward and how much actually
- 828 companies are already doing in the context of renewing old
- 829 infrastructure and simultaneously addressing methane leaks.
- 830 Mr. {McNerney.} Are there particular technologies that
- 831 the DOE would want to support in this area?
- Mr. {Moniz.} For example, we very much want to keep
- 833 pushing--and RPE will be pursuing this--really high quality,
- 834 lower cost detectors and sensors so that we can know where
- 835 the leaks are.
- 836 Mr. {McNerney.} Performance based standards?
- 837 Mr. {Moniz.} Right.
- Mr. {McNerney.} Very good.
- Mr. {Moniz.} Yeah.
- Mr. {McNerney.} Thank you, Mr. Chairman. I yield back.
- Mr. {Whitfield.} The gentleman yields back. At this
- 842 time, I will recognize the gentleman from Louisiana, Mr.
- 843 Scalise, for 5 minutes.
- Mr. {Scalise.} Thank you, Mr. Chairman, appreciate you

845 having the hearing. And, Secretary Moniz, appreciate you 846 being here to talk about the Department's budget and 847 obviously the policies that then go into the funding that 848 would come from that budget. When I look at your budget, you 849 are requesting a 715 million dollar increase over where you 850 currently are. And, obviously, we are trying to get control 851 over spending in Washington. Washington is spending more 852 than we take in. We are actually trying to go department by 853 department to actually start trying to get Washington to live 854 within its means, meaning to spend less than it is taking in-855 -less than it is spending right now, because it spends more 856 than it takes in. So when you ask for a 715 million dollar 857 increase, I know you look at some of the agencies, and you 858 have a 22 percent increase requesting for renewable energy. 859 And we are already spending a lot of money. It is not like 860 there is not money being spent on renewable energy. This Committee has had a lot of hearings on some of those 861 862 boondoggles things, like Solyndra and others. And when you 863 look at a request like this--and you are asking for 715 864 million more. Somewhere in the neighborhood of 250 million 865 or more of that money is going to have to be borrowed from 866 countries like China. I mean, do you factor that in when you 867 are asking us for this kind of increase that a large portion 868 of that is money that is not just sitting around somewhere?

- 869 It is literally money that is going to be borrowed with that
- 870 bill being sent to our kids?
- Mr. {Moniz.} Well, first of all, I do not subscribe to
- 872 the boundoggle. We can come back to that. But--
- Mr. {Scalise.} It is the level of the expenditure--
- Mr. {Moniz.} With regard to the budget--clearly, the
- 875 administration budget is consistent with the money lying
- 876 budget. So it obeys the cap. It is essentially flat dollars
- 877 from fiscal year 2014. Within that overall budget, the
- 878 President chose to give greater emphasis to some of our
- 879 programs, both in energy and in nuclear security.
- 880 Mr. {Scalise.} And I know we talked about this
- 881 yesterday at a separate hearing, but, you know, the Secretary
- 882 of State had made comments that global warming and this
- 883 climate change agenda is a bigger threat to American than
- 884 terrorism. I would dispute that. I don't know--I won't ask
- 885 you for that reaction. But I do want to ask you because you
- 886 did touch on the President's supposed all of the above energy
- 887 strategy, and I know your Agency is tasked with coming up
- 888 with the strategy for the country. When we talk about the
- 889 President's approach to energy, you know, I know he talks
- 890 about all of the above, but when you look at the numbers, it
- 891 just doesn't back up what he says. And specifically, I want
- 892 to talk about energy production on federal lands. I was able

893 to get this information from the American Enterprise 894 Institute. They do some really good research on a lot of 895 fronts. But on energy production, they actually have charted 896 how--this is actual change in fossil fuel production over the 897 years. And so they are showing--you know, especially when 898 you look from 2009 to today, a dramatic increase in 899 production on state and private lands, which I know the 900 President likes taking credit for. But when it comes to 901 areas where the federal government actually has authority, on 902 federal lands, you have a 15 percent decrease. So you have a 903 dramatic difference in how our energy portfolio is playing 904 out in the real world. You are seeing state and private land 905 production dramatically up. But--on federal lands. Because 906 of this Administration's policies, you actually see a 907 dramatic decrease in energy production. And so when the President talks about an all of the above strategy, he is not 908 909 carrying that out in his policies. His policies are actually 910 hurting production on federal lands. Fortunately, we have 911 got private lands in states that are making up the 912 difference. But the federal government is going after them 913 too. So I want to ask you, when it comes to this idea of an all of the above strategy, which I fully embrace, President 914 915 Obama does not embrace and the numbers back that up. But 916 when you see some of his other agencies, like EPA and

- 917 Department of Interior, de facto carrying out a different
- 918 strategy, how much interaction do you have, as Secretary of
- 919 Energy, trying to push for an energy strategy on one hand,
- 920 but then having agencies like the EPA trying to shut some of
- 921 that production down? Do you all try to coordinate and say
- 922 hey, we want an all of the above strategy? And if you really
- 923 mean it, are you going to agencies like EPA and saying stop
- 924 this war on coal that is killing jobs, killing energy. Stop
- 925 this war on--you know, they are attempting to have a war on
- 926 hydraulic fracturing to shut some of that down. I mean, do
- 927 you all have any interaction on that?
- 928 Mr. {Moniz.} We certainly do. I would like to note
- 929 first of all that I feel we do have an all of the above
- 930 strategy. And it is a very strong one. And if I--
- 931 Mr. {Scalise.} What do you say about these numbers
- 932 though? The numbers don't back it up.
- 933 Mr. {Moniz.} So if I may make two comments, sir?
- 934 Mr. {Scalise.} Sure.
- 935 Mr. {Moniz.} Respectfully. The first, the investments
- 936 in these different areas, it is not only these discretionary
- 937 numbers in the fiscal year 2015 budget. If you look at coal,
- 938 we have 6 billion dollars in CCS projects that are coming on.
- 939 We have an 8 billion dollar loan guarantee program for fossil
- 940 energy across the board. We just did a loan for nuclear.

- 941 The--
- 942 Mr. {Scalise.} You are talking about money. But I am
- 943 talking about the results.
- 944 Mr. {Moniz.} And--
- 945 Mr. {Scalise.} The results are that production is down
- 946 on federal lands.
- 947 Mr. {Moniz.} And--
- 948 Mr. {Scalise.} Do you dispute that?
- 949 Mr. {Moniz.} And if you look at that specific issue, I
- 950 might observe that a major driver of that is geology. The--
- 951 Mr. {Scalise.} Do you dispute that it is down,
- 952 production is down on federal lands?
- 953 Mr. {Moniz.} No, those are data.
- 954 Mr. {Scalise.} Right. That is correct.
- 955 Mr. {Moniz.} However, unconventional reservoirs are not
- 956 in the traditional areas. The market has moved to the
- 957 Marcellus Shale, to the Eagle Ford, to the Bachan. So is
- 958 the--
- 959 Mr. {Scalise.} And I know I am out of time. I
- 960 appreciate that. And I yield back the balance of my time.
- 961 Mr. {Whitfield.} At this time, I would like to
- 962 recognize the gentleman from California, Mr. Waxman, for 5
- 963 minutes.
- 964 Mr. {Waxman.} Thank you, Mr. Chairman. Secretary

- 965 Moniz, that was an interesting line of questioning. It was
- 966 more trying to provoke you. Are we not following an all of
- 967 the above strategy? It seems to me you were outlining a lot
- 968 of different areas where we are pursuing energy development.
- 969 I assume that development on public lands is just a small
- 970 part of the overall energy areas that we are concerned--
- 971 Mr. {Moniz.} Well, and that--so, yes--so bottom line,
- 972 yes. We are pursuing an all the above strategy. And I think
- 973 our energy system is showing it, even as we have reduced
- 974 carbon emissions at the same time.
- 975 Mr. {Waxman.} I tend to think that the Republicans
- 976 don't want an all of the above, they want a strategy to
- 977 continue to rely on fossil fuels, especially coal. And then
- 978 we talk about a war on coal. I just can't understand this
- 979 argument, the war on coal. Coal is losing out, not because
- 980 of any government actions. It is losing out because of
- 981 market forces. Utilities are finding it less expensive to
- 982 use natural gas. And even though we subsidize coal, but not
- 983 requiring them to pay for the external costs of their use of
- 984 cheap coal, they can't compete at the present time. But they
- 985 are also the leading source of carbon emissions.
- 986 I mentioned in my opening statement the
- 987 intergovernmental panel on climate change. Their report
- 988 should be a wakeup call. Everyone is--the world's leading

- 989 scientists are telling us everyone is going to be impacted by
- 990 climate change, no country or region is immune. If we listen
- 991 to our scientists and invest in the clean energy
- 992 technologies, that will put our country and the world on the
- 993 path to a sustainable and prosperous energy future. That
- 994 seems to be the course we should be taking, not just no
- 995 action which is what we hear more often than not from the
- 996 leadership on this Committee.
- 997 As a scientist, I would like to ask you about the
- 998 consequences of inaction. Last year, DOE examined the
- 999 impacts of climate change and what it would mean for energy
- 1000 infrastructure as a result of higher temperatures, drought,
- 1001 sea level rise, extreme weather events. What did DOE find?
- 1002 Mr. {Moniz.} I am--I missed the last part.
- 1003 Mr. {Waxman.} Well, I wanted to know what DOE found in
- 1004 terms of the impact of climate change on energy
- 1005 infrastructure.
- 1006 Mr. {Moniz.} Oh, I see. Um-hum. Um-hum. Yes. So the
- 1007 risks and vulnerabilities report that you are referring to
- 1008 certainly lays out rather dire consequences for our energy
- 1009 infrastructure. The--I might add the President, in the
- 1010 climate action plan, of course, elevated adaptation and
- 1011 resilience of energy infrastructure to a very high level,
- 1012 precisely a anticipating what the report said this week that

- 1013 we are seeing the consequences and they are going to get
- 1014 worse.
- 1015 Mr. {Waxman.} Um-hum.
- 1016 Mr. {Moniz.} And prudence requires us both to try to
- 1017 mitigate further consequences to adapt as well.
- 1018 Mr. {Waxman.} But let me ask you, if we have sea levels
- 1019 rising and floods and storms and wildfires, I don't--
- 1020 Mr. {Moniz.} Right.
- 1021 Mr. {Waxman.} That is going to put coastal and inland
- 1022 energy facilities at risk, among others. Droughts will
- 1023 impair power plant cooling systems, increase the risk of
- 1024 shutdowns.
- 1025 Mr. {Moniz.} Um-hum.
- 1026 Mr. {Waxman.} Higher temperatures will put stress on
- 1027 our electricity systems and reduce the efficiency of
- 1028 generation and transmission infrastructure. If all those
- 1029 things happen, aren't we talking about an all of the above
- 1030 strategy of ignoring climate change at our own peril?
- 1031 Mr. {Moniz.} Yes. And they have all happened already.
- 1032 We have had power plants shutdown because of warmer waters,
- 1033 for example.
- 1034 Mr. {Waxman.} In the west, climate change is expected
- 1035 to decrease the amount of snow pack. And we are already
- 1036 seeing in recent years in California a problem. What effect

- 1037 is that going to have on water availability for energy
- 1038 generation, agriculture and drinking water?
- 1039 Mr. {Moniz.} It would be a tremendous impact. And,
- 1040 again, it is already there. We are seeing it. The Colorado
- 1041 River, as you know very well, is in a very difficult
- 1042 situation after years of drought.
- 1043 Mr. {Waxman.} Climate change is going to impact
- 1044 everyone, but it won't impact everyone equally. Some in the
- 1045 coal industry are engaged in a publicity campaign to convince
- 1046 Americans that the key to addressing poverty in the world's
- 1047 poorest countries is to get them to use coal. I find this
- 1048 deeply cynical. In fact, Secretary Moniz, didn't the IPPC
- 1049 find that poor people and poor countries will be hit hardest
- 1050 by climate change? And wouldn't uncontrolled burning of coal
- 1051 exacerbate these impacts?
- 1052 Mr. {Moniz.} Well, increased carbon emissions in
- 1053 general would of course. And you are certainly correct that
- 1054 the poorest societies are the most vulnerable.
- 1055 Mr. {Waxman.} Well, it just strikes me that we are
- 1056 whistling past the graveyard when we hear people talking
- 1057 about how the war on terrorism is something that we ought to
- 1058 pay more attention to than climate change. You know, you got
- 1059 to pay attention to problems. And the big, huge problem that
- 1060 is being ignored on this Committee is the problem of climate

- 1061 change. And I hope that will change, because we do have a
- 1062 choice to make. Thank you, Mr. Secretary.
- 1063 Mr. {Moniz.} I agree.
- 1064 Mr. {Whitfield.} The gentleman's time has expired. At
- 1065 this time, I will recognize the gentleman from Texas, Mr.
- 1066 Hall, for 5 minutes.
- 1067 Mr. {Hall.} Thank you, Mr. Chairman. And, Mr.
- 1068 Secretary, I thank you for being here. It is good to see you
- 1069 again.
- 1070 Mr. {Moniz.} Good to see you.
- 1071 Mr. {Hall.} I want to touch on what is going on in
- 1072 Russia and the Ukraine a bit, and also a little bit from what
- 1073 we have been talking about. But what--I know that crisis
- 1074 must have influenced your decision in making with respect to
- 1075 LNG Exports. And I understand Russia has recently raised the
- 1076 price of natural gas to Ukraine by 40 percent. It seemed
- 1077 like the Chairman of Energy and Commerce touched on that a
- 1078 moment ago. Do you think--at what point are delays going to
- 1079 deny the private sector the ability to export LNG negatively?
- 1080 How does that impact job creation here in our country?
- 1081 Mr. {Moniz.} Well, sir, again, the public interest
- 1082 determination that we are required to make by law has us
- 1083 balancing various factors. The international situation is
- 1084 certainly one of them. And that was noted in our last Jordan

- 1085 Cove conditional approval. But also of course, very
- 1086 paramount is the impact on domestic markets and
- 1087 manufacturing. And as you know, the--many of the
- 1088 manufacturing community remain very concerned about--none
- 1089 about having no exports, but about going too fast. So we are
- 1090 in a situation of balancing that. We have to look at the
- 1091 cumulative impacts of exports. I might add, it--you know,
- 1092 there is this view of somehow not doing enough for something.
- 1093 But I might add--
- Mr. {Hall.} Are delays--
- 1095 Mr. {Moniz.} But I might add that the--so far, the
- 1096 conditional approvals--again, we all know that gas will not
- 1097 flow for several years yet, except for the first project.
- 1098 But the amount of approval so far, 9.3 billion cubic feet per
- 1099 day, is almost equal to the amount currently exported by far
- 1100 the world's biggest exporter, Gutter. So what we have
- 1101 approved already puts us essentially at the top of the export
- 1102 list. So this is not a small amount.
- 1103 Mr. {Hall.} Well, I want to get back to offshore
- 1104 situation. In December 2012, Congress passed, and our
- 1105 President signed into law, the Deepwater Ports Act, contained
- 1106 authority for DOE to create a similar and a simultaneous
- 1107 process for offshore projects that would be permitted under
- 1108 the Department of Transportation Maritime Administration, not

- 1109 for--and the land based projects would continue under FERC.
- 1110 But from what I have been told, and I guess what I
- 1111 understand, the DOE is not complying with the 2012 law
- 1112 change, allowing non-FERC offshore projects. Is that true?
- 1113 Mr. {Moniz.} Well, I don't believe so. But I will look
- 1114 into this, Mr. Hall. Certainly, I know there it is a
- 1115 different process using MARAD.
- 1116 Mr. {Hall.} And if it is, what seems to be the holdup?
- 1117 Mr. {Moniz.} My understanding is that--and, again, I
- 1118 will have to get back to you on this in detail. I am sorry.
- 1119 Mr. {Hall.} All right.
- 1120 Mr. {Moniz.} But I think they address--
- Mr. {Hall.} If you would--
- Mr. {Moniz.} I will do that. Yes.
- 1123 Mr. {Hall.} I don't know how much time--I can't see
- 1124 that sign too good. But I have heard from companies that are
- 1125 ready for their permits to be approved and would be able to
- 1126 export LNG this year. They have global customers just
- 1127 waiting for these projects to move forward, I am told. And
- 1128 the sooner we do this, Mr. Secretary, the better it is going
- 1129 to be for our economy, I think. And the faster we can
- 1130 provide stability in uneasy parts of the world, like the
- 1131 Ukraine that I mentioned to start with, I would appreciate
- 1132 you also looking into that and giving me some information on

- 1133 it.
- 1134 Mr. {Moniz.} Yeah.
- 1135 Mr. {Hall.} I yield back my time.
- 1136 Mr. {Moniz.} Thank you. Let me--may I accomplish one
- 1137 comment on that?
- 1138 Mr. {Hall.} Yes, sir. Please.
- 1139 Mr. {Moniz.} Just to note that in a certain sense, we
- 1140 have already had some kind of shadow exports in the sense
- 1141 that as you well know 5, 6 years ago, there was the
- 1142 expectations of major LNG imports to the United States. Our
- 1143 not having those imports has had those cargoes go elsewhere,
- 1144 including to Europe.
- Mr. {Hall.} And we have European allies that are losing
- 1146 their bargaining power with Russia.
- 1147 Mr. {Moniz.} Yeah. Last week, in fact it was announced
- 1148 in Europe--and Tuesday--Wednesday--what is today? Yesterday,
- 1149 there as a meeting in Brussels. And we are going to have a
- 1150 meeting of the--under the G7 of energy ministers to look at
- 1151 our collective energy security.
- 1152 Mr. {Hall.} All right. And I thank you. And I yield
- 1153 back, Mr. Chairman. Thank you.
- 1154 Mr. {Whitfield.} The gentleman yields back. At this
- 1155 time, I will recognize the gentleman from New York, Mr.
- 1156 Tonko, for 5 minutes.

- 1157 Mr. {Tonko.} Thank you, Mr. Chair. Mr. Secretary,
- 1158 thank you for your tremendous leadership over at DOE. I am
- 1159 very pleased to see the Administration's request for an
- 1160 increase in the energy efficiency renewable energy account.
- 1161 While I know you were just criticized for that, I for one am
- 1162 very pleased with that outcome for many reasons, including
- 1163 the promising opportunities for clean energy, improvements in
- 1164 energy efficiency, domestic manufacturing and certainly for
- 1165 modernizing the grid and making it more secure and resilient.
- One of the key technologies that will enable much of
- 1167 this is of course energy storage. I firmly believe if we can
- 1168 make better batteries and energy storage systems, we will
- 1169 advance in many of the areas more expeditiously in those
- 1170 areas that I have just mentioned.
- I know this area of research and development is part of
- 1172 the vehicles technology work at the Department of Energy and
- 1173 that you are doing it very well. How close are we to getting
- 1174 energy storage systems that will enable us to rely more
- 1175 heavily with the opportunity for storage with our solar and
- 1176 wind power?
- 1177 Mr. {Moniz.} Well, if I start with the vehicle storage
- 1178 that you mentioned, we should note that costs per kilowatt of
- 1179 storage have dropped by a factor of two in about four years,
- 1180 which is very encouraging. We need another factor of two or

- 1181 three to really get to the cost point of a major commercial
- 1182 market, although we are seeing tremendous progress. We did
- 1183 have almost 100,000 plugin hybrid sales last year, for
- 1184 example, double 2012. So that is looking very promising over
- 1185 the next say 10 years.
- On utility scale storage, we do have--we produced a
- 1187 report. If you haven't seen it, we would be happy to provide
- 1188 it, on utility scale storage a few months ago. Let us get
- 1189 that to you if you haven't see it. The--we have a ways to go
- 1190 to reach the cost points that one will need. We did have a--
- 1191 so we have a budget increase request for fiscal year 2015.
- 1192 Mr. {Tonko.} Right. And I know that GE in my district
- 1193 is working on advanced battery manufacturing that will
- 1194 address storage capacity for renewables.
- 1195 Mr. {Moniz.} Yes.
- 1196 Mr. {Tonko.} Does DOE have some demonstration projects
- 1197 underway with these systems?
- 1198 Mr. {Moniz.} I am not personally aware, but I will
- 1199 check back on that. I am just not aware, Mr. Tonko.
- 1200 Mr. {Tonko.} Okay. As you well know, the electric
- 1201 generation and transmission systems that make up the grid are
- 1202 undergoing tremendous changes due to many factors, including
- 1203 an increased deployment of distributed generation, retirement
- 1204 of old generating plants, shifts in the areas with

- 1205 electricity demand, and certainly shifts in fuel mix, to name 1206 a few. I believe energy storage could play an important role 1207 in a newly designed grid that is more flexible, resilient and 1208 efficient. But these developments will also challenge the 1209 traditional financing model for utilities. Is the Department 1210 looking at both the technical and non-technical barriers to 1211 deployment of clean energy technologies, and the challenges 1212 that -- the challenge that is presented to our current grid 1213 infrastructure and traditional financing models? 1214 Mr. {Moniz.} Yes. That is a very important point. Thank you. We are looking at this in a number of ways. 1215 1216 particular, again, the quadrennial energy review is -- for this 1217 year, it is entirely focused on the transmission, storage and 1218 distribution of energy, both electricity and fuels. 1219 key issue. Clearly, there is technology involved with the 1220 grid making phase or measurements, et cetera. But a lot of 1221 it is policy, including state policy as to how one does that. 1222 The other point I would mention is -- and again, you are 1223 completely on the mark as far as I am concerned--is business 1224 models are challenged in -- as we look forward to distributed 1225 generation, smarter grids. 1226 But also, I might add, the anticipation that we will
- But also, I might add, the anticipation that we will continue to have no or very, very modest demand growth as our efficiency actions take hold. And so we do have to also--we

- 1229 are trying to think through how do we see a transformation
- 1230 happening in a period of let us say flat demand.
- 1231 Mr. {Tonko.} Um-hum. In your testimony, you also
- 1232 talked about the impact on the utilities with experiences
- 1233 like Hurricane Sandy in New York. Given our recent
- 1234 experiences and the prospect of more storms of this type as a
- 1235 result of climate change, is this something the
- 1236 Administration sees as a key component of climate adaptation?
- 1237 Mr. {Moniz.} Absolutely. And we have in our budge, in
- 1238 fact, a proposals for increasing our emergency response
- 1239 capacity that we exercise under FEMA. That would include,
- 1240 for example, setting up an emergency response room for energy
- 1241 infrastructure. And it also would entail--we believe it
- 1242 would be a good investment to have a DOE person assigned to
- 1243 each of the FEMA regions so that the energy issues are
- 1244 understood upfront, and that can cut time out from any
- 1245 response to an emergency.
- 1246 Mr. {Tonko.} Thank you, Mr. Secretary.
- 1247 Mr. {Moniz.} Thank you.
- 1248 Mr. {Tonko.} And I thank you for your efforts. Mr.
- 1249 Chair, I yield back.
- 1250 Mr. {Whitfield.} At this time, I recognize the
- 1251 gentleman from Illinois, Mr. Shimkus, for 5 minutes.
- 1252 Mr. {Shimkus.} Thank you, Mr. Chairman. Mr. Secretary,

- 1253 on July 31 of last year, you testified before this Committee,
- 1254 and you said, and I quote, ``We had made very clear we follow
- 1255 the law. The law will be determined by this Court decision
- 1256 that we are all awaiting. And if it directs the NRC to pick
- 1257 up the license, we will do our job to support that, given
- 1258 appropriations.'' Your quotation. On November 19 of last
- 1259 year, the D.C. Circuit Court observed that the DOE is not
- 1260 following the law, noting that DOE's current strategy, and I
- 1261 quote, ``is based on assumptions directly contrary to the
- 1262 law.''
- 1263 The Court ordered you to, and I quote, ``submit to
- 1264 Congress a proposal to change the fee to zero until such a
- 1265 time as either the Secretary''--that is you--``chooses to
- 1266 comply with the Act as it is currently written, or until
- 1267 Congress''--that is us--``enacts an alternative waste
- 1268 management plan.''
- Does the Administration have any plans to resume work on
- 1270 Yucca Mountain and comply with the law, which is the Nuclear
- 1271 Waste Policy Act, as it is currently written?
- Mr. {Moniz.} Well, first of course, we did submit the
- 1273 letter to the Congress on I think January 3 on the--
- 1274 Mr. {Shimkus.} Well, the question is, does the
- 1275 Administration have any plans to resume work on Yucca
- 1276 Mountain and comply with the Nuclear Waste Policy Act as it

- 1277 is currently written--as it is currently written?
- 1278 Mr. {Moniz.} Yes. Secondly--
- 1279 Mr. {Shimkus.} What is the answer?
- 1280 Mr. {Moniz.} In terms of the Court decision with the
- 1281 NRC, of course. They have resumed their activity. We are
- 1282 supporting that as I said we would. So we will in fact
- 1283 probably have our technical--
- 1284 Mr. {Shimkus.} Well, I am going to follow through,
- 1285 because I think we have got questions and testimony in your
- 1286 budget submission that adequately will prove that you are not
- 1287 complying and following with the law. The Administration's
- 1288 budget indicates the need for legislation to carry out your
- 1289 DOE strategy for spent nuclear fuel management, especially
- 1290 considering it is based on assumptions directly contrary to
- 1291 law. Is the Administration going to propose legislation?
- 1292 Mr. {Moniz.} I would have to go consult with my
- 1293 colleagues on that. I am not aware of anything at the
- 1294 moment.
- 1295 Mr. {Shimkus.} So let me get this straight. The
- 1296 Administration doesn't like the existing law, and is choosing
- 1297 not to execute it. So the Administration wants Congress to
- 1298 write a new law that it might like better, but won't propose
- 1299 to Congress what that new law should look like? And in the
- 1300 meantime, you want to keep spending taxpayer's money on your

- 1301 strategy, even after the D.C. Circuit Court noted that it is
- 1302 based upon assumptions directly contrary to law, and has
- 1303 directed DOE--that is you--to stop collecting the nuclear
- 1304 waste fees from electricity consumers. If the Administration
- 1305 won't follow the law on the books, why should we have any
- 1306 confidence that you will follow a new law?
- 1307 Mr. {Moniz.} The--first, I would like to note that as
- 1308 was stated publicly in a Senate hearing, I did in fact work
- 1309 with the Committee in terms of shaping a proposal--
- 1310 Mr. {Shimkus.} Mr. Secretary, this is a budget hearing-
- 1311 -
- 1312 Mr. {Moniz.} And--
- 1313 Mr. {Shimkus.} And what we are trying to find out is
- 1314 why you are not submitting money to comply with the law?
- 1315 Mr. {Moniz.} And--
- 1316 Mr. {Shimkus.} And by not submitting money in your
- 1317 proposed budget, in conclusion, you are directing your Agency
- 1318 to not follow the law.
- 1319 Mr. {Moniz.} If I may add, the--I am also happy to work
- 1320 with this body to formulate any Bill. Secondly, we have more
- 1321 than adequate funding right now to do our--all the responses
- 1322 that might be called for from the NRC to support their
- 1323 process. As I said, we expect our first report to be
- 1324 submitted very soon, probably the end of this month. And,

- 1325 third, our budget request is for all activities, which are
- 1326 authorized under the Nuclear Waste Policy Act.
- 1327 Mr. {Shimkus.} In the context of DOE's assurances that
- 1328 it would follow the law, you, DOE, has repeatedly committed
- 1329 to this Committee that DOE would honor the NRC's November 19
- 1330 Order, both in correspondence and in hearings, including your
- 1331 testimony that I noted earlier. As recently as January 9
- 1332 letter to his Committee, DOE stated it would honor NRC's
- 1333 request, complete a groundwater supplement to Yucca Mountain
- 1334 EIS. However, on February 28, you, DOE, notified NRC that it
- 1335 would not prepare the EIS supplement. Why did DOE change its
- 1336 mind over those seven weeks, and was your commitment to this
- 1337 Committee even a factor in that decision?
- 1338 Mr. {Moniz.} The--again, the core activity that we need
- 1339 to do for NRC is preparing the--updating the technical issues
- 1340 on groundwater. The--
- 1341 Mr. {Shimkus.} I have 15 seconds. Let me just go to a
- 1342 statement you have in your testimony.
- 1343 Mr. {Moniz.} Yes.
- 1344 Mr. {Shimkus.} You say, ``and a consent based citing.''
- 1345 Where in the Nuclear Waste Policy Act is there a--any--the
- 1346 words anywhere consent based citing? Where is it in the law?
- 1347 Mr. {Moniz.} I would have to go back to my general
- 1348 counsel to answer that question.

- 1349 Mr. {Shimkus.} Oh, come on, Mr. Secretary, you know
- 1350 that consent based citing is not in the Nuclear Waste Policy
- 1351 Act. And that is why your job is to comply with the laws of
- 1352 the land, and you continually thwart doing that. I yield
- 1353 back my time.
- Mr. {Moniz.} Well, we believe we are complying.
- 1355 Mr. {Whitfield.} The gentleman's time has expired. At
- 1356 this time, I recognize the gentleman from Texas, Mr. Green,
- 1357 for 5 minutes.
- 1358 Mr. {Green.} Thank you, Mr. Chairman. And, Secretary
- 1359 Moniz, welcome you back to our Committee. I also want to
- 1360 thank you for your recent trip to Houston and speaking to our
- 1361 Senator conference there. The budget we are discussing today
- 1362 has a significant impact on the activities you witnessed in
- 1363 Houston.
- I want to start by asking you about pending LNG export
- 1365 applications. On March the 24th, the DOE approved the
- 1366 seventh non-FTA application for the Jordan Cove energy to be
- 1367 located on the west coast. This approval came within six
- 1368 weeks after the approval of the Cameron location from
- 1369 Louisiana. The--in October of 2013, the government was shut
- 1370 down for 17 days. The Department repeatedly stated due to
- 1371 the shutdown, the operations of the Agency significantly
- 1372 slowed down.

- 1373 My first question is has the Department fully recovered
- 1374 and staffed up from the delay, and does the fiscal year 2015
- 1375 budget include this?
- 1376 Mr. {Moniz.} Well, yes. We are fully operational.
- 1377 Mr. {Green.} Okay. Does the six week approval of
- 1378 Jordan Cove reflect this recovery?
- 1379 Mr. {Moniz.} Well, each license is a little bit
- 1380 different in terms of the timing. But I think if you look
- 1381 historically, you can see what the timing has been post-shut
- 1382 down.
- 1383 Mr. {Green.} Okay. Will the Department continue to
- 1384 move at this pace?
- 1385 Mr. {Moniz.} Well, again, I cannot make a prediction on
- 1386 any individual application. But our process, as you know, is
- 1387 well known. It has been very transparent. Not everyone is
- 1388 happy with it apparently, but it is a pretty transparent
- 1389 process. And we have managed to now to get through--well, in
- 1390 my tenure, I think 5 of these licenses.
- 1391 Mr. {Green.} Once FERC issues the environmental
- 1392 assessment, what steps or analysis does the DOE take with
- 1393 respect to the final issuance of the non-FTA's work permit?
- Mr. {Moniz.} Well, when it comes back to the
- 1395 Department, then we obviously look at the NEPA statement.
- 1396 There is a decision to be made as to whether any other

- 1397 analysis is required. But that is something that we haven't
- 1398 faced yet, at least I haven't faced yet. But--so we are
- 1399 expecting to get some of these NEPA analyses back from FERC
- 1400 this spring.
- 1401 Mr. {Green.} Well, and you know the history of the--we
- 1402 first thought we were going to import LNG in '05. And now we
- 1403 are using that '05 law to export it. And there is I guess
- 1404 some interest in expanding exporting, and there is
- 1405 legislation to consider it.
- 1406 Mr. {Moniz.} Um-hum.
- 1407 Mr. {Green.} But the Department is actually, you know,
- 1408 approving these permits. And there will still be a--I think
- 1409 the first one probably won't be able to export until sometime
- 1410 next year, which is a Cheniere facility in--
- 1411 Mr. {Moniz.} End of next year.
- Mr. {Green.} End of next year.
- Mr. {Moniz.} Um-hum.
- 1414 Mr. {Green.} So even if we approved all of these
- 1415 permits now, that natural gas--that LNG probably wouldn't get
- 1416 to someone. And my concern is yesterday I met with a number
- 1417 of German industrialists who would like to buy our natural
- 1418 gas. The problem is most of those permits that have been
- 1419 issued, and the ones that are on the--in line are actually
- 1420 contracted to send that LNG to Asia. And I asked them, I

- 1421 said if you all want to get in line, you know, you don't
- 1422 build an LNG permit unless you can have some customers for
- 1423 it. And I know a lot of these companies would like to have
- 1424 the customers in Europe as well as Asia. So--but any way, I
- 1425 appreciate that. So--
- 1426 Mr. {Moniz.} May I just comment, if--
- Mr. {Green.} Sure.
- Mr. {Moniz.} That the first license that is granted,
- 1429 the Cheniere project that you mentioned to export end of next
- 1430 year, they do have European companies. IN fact, they just
- 1431 announced one with a European company contracting for the
- 1432 volumes. But I want to emphasize European companies does not
- 1433 necessarily mean they will deliver the cargoes to Europe.
- 1434 Mr. {Green.} Well--
- 1435 Mr. {Moniz.} That is up to those companies to decide.
- 1436 Mr. {Green.} That is true. Thank you. The carbon
- 1437 capture and storage is constantly discussed in the context of
- 1438 use and the possibility to be used as carbon control
- 1439 technology under EPA rules for utilities and refiners. The
- 1440 problem is that it is still too expensive commercially to be
- 1441 used. This year, the Department's budget was reduced for
- 1442 carbon capture and storage by 40 percent. Does this reduced
- 1443 funding level indicate Department believes CCS is
- 1444 commercially viable?

- Mr. {Moniz.} No, I wouldn't reach that conclusion or
- 1446 the opposite conclusion either. I mean, I think the--we are
- 1447 continuing to move forward with these projects. The
- 1448 technologies -- all the technologies have been used in a
- 1449 commercial context. Clearly, as with any of the new
- 1450 technologies, renewables as well, our job is to continue to
- 1451 work on cost reduction across the board.
- Mr. {Green.} Well, and I think we probably disagree a
- 1453 little bit on commercially, you know, cost effective. But I
- 1454 know we would like to do it. Mr. Chairman, I have another
- 1455 question I would like to submit on American manufacturing.
- 1456 And I support that in the President's budget recommending a
- 1457 69 percent increase in advanced manufacturing funding. And I
- 1458 would hope we could have a response from the Department.
- 1459 Thank you. And I yield back my time.
- 1460 Mr. {Whitfield.} That will be given to the Department
- 1461 for response. At this time, I recognize the gentleman from
- 1462 Nebraska, Mr. Terry, for 5 minutes.
- 1463 Mr. {Terry.} Thank you, Mr. Chairman. And thank you,
- 1464 Mr. Secretary, for being here today. I noted in the budget
- 1465 that the lowest sub-agency or department--lowest funded is
- 1466 the electric delivery and energy reliability. And so could
- 1467 you give me quickly the mission statement of that sub-agency,
- 1468 electric delivery and energy reliability?

- 1469 Mr. {Moniz.} It has two--I would say two principle
- 1470 roles. One is to develop and--in the Recovery Act period, to
- 1471 also deploy critical technologies for 21st century grid
- 1472 modernization. So for example, they did a tremendous amount
- 1473 in terms of doing phase measurements to understand stability
- 1474 of the grid, working with the utilities and ISOs, actually.
- 1475 The second area is the one that I did mention earlier on
- 1476 strengthening emergency response capabilities. So the
- 1477 principle organization for our work on emergency response
- 1478 under FEMA is in that office.
- 1479 Mr. {Terry.} Can you tell me how this Department or DOE
- 1480 then, on reliability and delivery, works with FERC and--I am
- 1481 sorry, EPA, or do they?
- Mr. {Moniz.} Well, we--obviously, we all have different
- 1483 responsibilities. We certainly coordinate. As an example,
- 1484 Acting Chairman LaFleur from FERC has come over twice for us
- 1485 to discuss the risks that have been very prominent recently
- 1486 around physical attacks on infrastructure.
- 1487 Mr. {Terry.} Yes. And that is going to be my next
- 1488 question.
- 1489 Mr. {Moniz.} Okay. So--
- 1490 Mr. {Terry.} But how about with EPA?
- Mr. {Moniz.} And with EPA, we have many, many
- 1492 discussions. Often, what we do is provide kind of technical-

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1493 -underpinning technical support in areas that they are
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1494 considering. We collaborate on things like the interagency

- 1495 methane strategy, et cetera.
- 1496 Mr. {Terry.} Yeah, the methane strategy is an
- 1497 interesting one, too. Now, I will disagree slightly in part
- 1498 with Mr. Waxman on market forces being simply prices, because
- 1499 sometimes energy feed stock sources are regional. For
- 1500 example, Nebraska, being a couple hour train ride for Powder
- 1501 River Basin coal, and so therefore Nebraska's heavily reliant
- 1502 on that level of coal. But it appears that some of the rules
- 1503 that the EPA is promulgating would force some of those
- 1504 smaller, older power--coal-fired power plants to spend more
- 1505 than the building or facility is worth to change to natural
- 1506 gas, or close. So I want to know if the electric delivery
- 1507 and energy reliability department sub-agency is working with
- 1508 EPA to figure out reliability when we have large gaps in
- 1509 production electrical generation in states like Nebraska if
- 1510 these rules become permanent?
- 1511 Mr. {Moniz.} I would say that there are three places in
- 1512 the Department that address these kinds of issues.
- 1513 Mr. {Terry.} All right.
- 1514 Mr. {Moniz.} I mean, one of course is EIA just on a
- 1515 purely data basis.
- 1516 Mr. {Terry.} Right.

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1517 Mr. {Moniz.} The Office of Electricity, as we
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- 1518 mentioned. But the third, and in some sense maybe the most
- 1519 active at the moment in the way you are mentioning is the
- 1520 Energy Policy and Systems Analysis Office, because in the -- in
- 1521 this quadrennial energy review, for which they play a key
- 1522 role, this whole question of reliability and resilience of
- 1523 energy infrastructure is the focus area for this year.
- Mr. {Terry.} Okay. And in that regard, and what
- 1525 happened in California, the Department, do they do a risk
- 1526 assessment on the vulnerability of the powered grid, either
- 1527 by an attack that occurred out in California, or even at a
- 1528 higher level that seems to be the rage in a lot of TV shows,
- 1529 EMPs.
- Mr. {Moniz.} Well, we have--on the first part, we have
- 1531 worked together with Homeland Security and state agencies,
- 1532 the Deputy Secretary in particular. We have had 13 regional
- 1533 meetings to address the issues of physical security. We work
- 1534 with utilities very closely. The utilities have done
- 1535 probably more than has been acknowledged in the press
- 1536 already, but there is a ways to go. The last meeting was
- 1537 just--the last of these meetings was just a week ago Friday,
- 1538 in fact, in New York. That was the last of the 13 meetings.
- 1539 ENPs is on the screen.
- 1540 [Slide]

- 1541 The--in our look at resiliency of infrastructure, both
- 1542 electricity and fuels, we are trying to start an analysis
- 1543 based on integrated sets of risks. So it is extreme weather.
- 1544 It is cyber. It is physical. It is ENPs. And it is the
- 1545 interdependencies of infrastructures as a risk in and of
- 1546 itself. Yield back.
- 1547 Mr. {Whitfield.} The gentleman's time has expired. At
- 1548 this time, I will recognize the gentlelady from California,
- 1549 Ms. Capps, for 5 minutes.
- 1550 Mrs. {Capps.} Thank you, Mr. Chairman. And thank you,
- 1551 Secretary Moniz, for being here today for your testimony. I
- 1552 am a longtime supporter of the Department of Energy's efforts
- 1553 to develop clean, renewable energy technologies. And of the
- 1554 many renewables out there, wind and solar are obviously the
- 1555 furthest along. But there are some other promising
- 1556 renewables in the works, including marine and hydrokinetic or
- 1557 MHK technologies.
- 1558 As you know, federal investments are crucial to
- 1559 advancing these technologies to commercial viability. And I
- 1560 will quote the DOE, as you stated in your 2015 budget
- 1561 justification. ``DOE plays a critical role in MHK
- 1562 technologies because of their nascent stage of development,
- 1563 which is similar to that of wind and solar technologies 20
- 1564 years ago.

- I have three questions around this topic, pretty
- 1566 specific or brief, if you will. Could you expand upon this
- 1567 point briefly? Why is DOE's involvement so important for
- 1568 developing these technologies at this early stage?
- 1569 Mr. {Moniz.} Well, I think as you said, as with others,
- 1570 the early stage is very hard to attract private sector
- 1571 funding, at least if it is not leveraged with some public
- 1572 funding.
- 1573 Mrs. {Capps.} You can recall that I--perhaps I can--
- 1574 that I raised this issue with you last September during a
- 1575 hearing as well. And you responded by saying that DOE was
- 1576 looking for ways to increase support, just as you just did,
- 1577 for what you referred to as these forgotten renewables, if
- 1578 you will. Given this perspective, I was puzzled to see a 25
- 1579 percent decrease for MHK in DOE's budget request this year.
- 1580 This was particularly troubling when compared to the 20
- 1581 percent increase for the Energy Efficiency and Renewable
- 1582 Energy, EERE, office overall. So what is with this
- 1583 divergence? Why did the relatively small MHK budget get such
- 1584 a sharp reduction?
- 1585 Mr. {Moniz.} Well, we did increase in terms of the
- 1586 other renewables, geothermal and in water.
- 1587 Mrs. {Capps.} Yes. Yes.
- 1588 Mr. {Moniz.} Within water, what the program did was

- 1589 rebalance because it was viewed as the relatively near term
- 1590 major micro-hydro opportunity. So they rebalanced. But, you
- 1591 know, I have said already I am--you know, I am happy to
- 1592 reexamine the balance of that with members who are
- 1593 interested.
- 1594 Mrs. {Capps.} I appreciate that, because I would like
- 1595 to question, you know, and say I like the old balance before.
- 1596 Some of my research companies do as well. It wouldn't take
- 1597 much to make a really big difference for these MHK industries
- 1598 right in such a critical time, as you know, in their
- 1599 development.
- 1600 Mr. {Moniz.} Um-hum.
- 1601 Mrs. {Capps.} I encourage the Department to make these
- 1602 investments, if you can. But even with this limited funding,
- 1603 I applaud you for making such good progress. In my district
- 1604 alone, DOE has funded two promising ocean energy projects, a
- 1605 local company called Aquantis is leveraging DOE investments
- 1606 to develop a cutting edge turbine to harness energy from
- 1607 ocean currents. And Cal Poly University in San Los Obispo in
- 1608 my district received funding to start planning a promising
- 1609 wave energy demonstration off--a project off the coast of
- 1610 California--central coast. I am proud to say that Cal Poly
- 1611 is one of only two projects selected in the country.
- Now, I want to ask you if DOE plans to provide continued

- 1613 support for these demonstration projects to help them get up
- 1614 and running. Is that critical as we--you acknowledge and I
- 1615 agree that what they call they dark phase of trying to
- 1616 attract funding from the outside when you--
- Mr. {Moniz.} Um-hum.
- 1618 Mrs. {Capps.} But so much promise is held there in this
- 1619 area. What are the next steps?
- 1620 Mr. {Moniz.} Well, I can assure you, first of all, I
- 1621 will go back and look at those projects. I am not up to the-
- 1622 -on the specifics. And will get back to you in terms how
- 1623 that looks going forward.
- Mrs. {Capps.} Excellent. I appreciate that.
- 1625 Mr. {Moniz.} Right.
- Mrs. {Capps.} Because I believe, as many of the folks
- 1627 who have done the research in my district have demonstrated
- 1628 to me, this holds great promise for the future. But it isn't
- 1629 yet to that stage that solar and wind are now even.
- 1630 Mr. {Moniz.} Um-hum. Yeah. It is longer term.
- 1631 Mrs. {Capps.} That is right. And so I would encourage
- 1632 you to explore in this direction. And I thank you very much
- 1633 for being here.
- Mr. {Whitfield.} The gentlelady yields back the balance
- 1635 of her time. Are you--
- 1636 Mrs. {Capps.} Yes. Oh, I am sorry. I do. Yes.

- 1637 Mr. {Whitfield.} Okay. At this time, I recognize the
- 1638 gentleman from Ohio, Mr. Latta, for 5 minutes.
- 1639 Mr. {Latta.} Thank you, Mr. Chairman. And, Mr.
- 1640 Secretary, thanks again for being with us today. And I know
- 1641 that I think from the last time you were here, I mentioned
- 1642 this before, but I think it is worth mentioning again that
- 1643 because, you know, we all have to look at who we represent.
- 1644 I represent about 60,000 manufacturing jobs in northwest and
- 1645 west central Ohio. And recently, I have heard from one of
- 1646 the--my constituent companies out there. And it is a large
- 1647 manufacturer that they had--they are in a voluntary
- 1648 curtailment contract with a local utility. In the years
- 1649 past, the agreement with the utility has amounted to some
- 1650 small savings for that company during these demands during
- 1651 the peak periods. But recently, the curtailments have often
- 1652 not really given any savings, because they have been actually
- 1653 cut back because we have had a pretty tough winter in Ohio
- 1654 and utilities are asked to, you know, do what they could. So
- 1655 they asked the companies. So it is important in these cases,
- 1656 because the minor savings that they had enjoyed are gone now.
- 1657 And it is also important that because of that, they have lost
- 1658 production time which means that if folks aren't working,
- 1659 people aren't bringing home a paycheck. And, you know, the
- 1660 employees of course got reduced hours. And then of course

- 1661 when you put that in--when people take their paychecks home
- 1662 with the increased electrical bills and more expensive
- 1663 healthcare premiums and things like that, it is pretty tough.
- So my concern and the concern of the manufacturers that
- 1665 I represent is that the problems today are only going to get
- 1666 worse as more and more of our coal powered generation units
- 1667 are being retired as a result of the Administration's
- 1668 regulations. And it is also important to note again, in Ohio
- 1669 that 78 percent of our energy in Ohio is coal based. And in
- 1670 some parts of the state, particularly at my area, it is even
- 1671 greater than that 78 percent.
- So my first question is what will DOE do, and you, to
- 1673 ensure that this nation's manufacturers have access to
- 1674 reliable and affordable electricity going forward? And
- 1675 again, a lot of my manufacturers are ones out there that
- 1676 really need that base load capacity because they run forges
- 1677 and everything else. So what can we expect in the future
- 1678 from the DOE?
- Mr. {Moniz.} Well, basically, I would say all of the
- 1680 above is part of addressing the electricity system, not only
- 1681 the electricity but certainly in that area. The fact is I
- 1682 think rates in general for consumers have come down with the
- 1683 natural gas revolution. And of course, that has also
- 1684 stimulated more manufacturing. Again, we have had perhaps

- 1685 125 billion dollars invested in new manufacturing capacity
- 1686 directly associated with the natural gas revolution. We will
- 1687 continue to work on the technology side to drive costs down
- 1688 for all of the energy sources. And also as was mentioned
- 1689 earlier, storage eventually to help with variable sources.
- 1690 And we will continue to--in this budget request, we will
- 1691 continue to have a major focus on trying to develop the
- 1692 foundational technologies for our advanced manufacturing
- 1693 future.
- Mr. {Latta.} Well, and I agree that, you know, we are
- 1695 seeing, you know, an explosion out there on the natural gas
- 1696 side, which is tremendous for our country. But, you know, in
- 1697 Ohio, we are very fortunate. In the eastern side of the
- 1698 state, we do have the Utica Shale. And of course, in
- 1699 Pennsylvania, you have Marcellus. But we just can't retrofit
- 1700 these plants. You know, the costs would almost be the costs
- 1701 of building a new plant in the retrofits. So these costs are
- 1702 going to be passed along to these manufacturers. So, you
- 1703 know, don't you agree that our manufacturers out there, to
- 1704 stay competitive across the world, have to have, you know,
- 1705 utility rates that are competitive, not just here in this
- 1706 country but across the world?
- 1707 Mr. {Moniz.} Well, and I think that is what we are
- 1708 seeing. We are seeing that the whole mentality

- 1709 internationally has changed about now the United States being
- 1710 a kind of a manufacturing center increasingly. And that is--
- 1711 a large part of that is because of our energy costs. So
- 1712 maintaining that edge is--
- 1713 Mr. {Latta.} Let me ask this. I know my time has run
- 1714 out. I just have one last question for you. If you would
- 1715 see that EPA regulations out there are going to impair
- 1716 electricity reliability and raise rates, would you raise
- 1717 that--those concerns directly to the EPA?
- 1718 Mr. {Moniz.} Well, again, in the--we--obviously, we
- 1719 communicate. But especially this year in our--in this
- 1720 quadrennial energy review, it will be looking across the
- 1721 Administration in an integrated way at how we maintain and
- 1722 sustain and develop energy infrastructure that serves the
- 1723 goals that you have stated.
- Mr. {Latta.} Mr. Chairman, I see my time has expired,
- 1725 and I yield back.
- 1726 Mr. {Whitfield.} The gentleman's time has expired. At
- 1727 this time, I recognize the gentleman from Pennsylvania, Mr.
- 1728 Doyle, for 5 minutes.
- 1729 Mr. {Doyle.} Thank you, Mr. Chairman. And, Secretary
- 1730 Moniz, welcome to the Committee. It is a pleasure to have
- 1731 you here.
- 1732 Mr. Secretary, the National Energy Technology Lab budget

- 1733 is something that I have a particular interest in. And as
- 1734 you may know, my colleagues on both sides of the aisle have
- 1735 asked the appropriators that the NETL be funded at 775.5
- 1736 million for fiscal year 2015. And of course, the President's
- 1737 budget has a number that is much, much lower than that. I
- 1738 wonder if you could elaborate on the Administration's vision
- 1739 for the NETL as it relates to the President's fiscal year
- 1740 2015 budget request, and could you hypothesize about the
- 1741 effects of the President's proposed budget on both research
- 1742 and jobs in southwestern Pennsylvania and West Virginia as it
- 1743 relates to the NETL?
- 1744 Mr. {Moniz.} Well, NETL, as you well know, and Mr.
- 1745 McKinley as well knows, is our lead fossil energy laboratory.
- 1746 It does have an unusual structure compared to our other
- 1747 laboratories in being a federal--having federal employees as
- 1748 opposed to contractor employees. I certainly remain
- 1749 committed to in particular to be honest to try to build--
- 1750 continue to build up the research and development activity
- 1751 within the laboratory. I think that we have room to increase
- 1752 that. And as one example in our budget submission this year,
- 1753 an area where NETL certainly has an interest in and strength
- 1754 is in something like methane hydrates where we proposed an
- 1755 increase I think from 5 to 15 million dollars, you know,
- 1756 because this could be--we don't know. But in a couple

- 1757 decades, this could be the new shale gas going forward. So
- 1758 those are the things that I will be looking at.
- 1759 Mr. {Doyle.} Yeah, thank you. And since Mr. McKinley
- 1760 is asking questions next, I am sure he will follow-up on
- 1761 NETL. I would like to move to CCS though. The Department's
- 1762 carbon capture and storage roadmap, which is the blueprint
- 1763 for DOE CCS investments notes that the Agency is developing
- 1764 the advanced technology platforms needed to prove that CCS
- 1765 can be a viable climate mitigation strategy.
- 1766 Mr. Secretary, I would like to take this opportunity to
- 1767 hear more about the current status of DOE CCS research
- 1768 development and demonstration efforts. And in your view, if
- 1769 you could tell us what role CCS technologies play in the
- 1770 future of coal in this country and around the world? And
- 1771 also, while you are addressing that, we know that EPA has
- 1772 proposed pollution standards for new coal fired plants that
- 1773 would effectively require such plants to use partial CCS.
- 1774 Some members of this Committee have asserted that CCS just
- 1775 isn't feasible for coal fired plants at this time. Dr. Julio
- 1776 Friedmann from your Department testified in an O&I
- 1777 Subcommittee that first generation CCS technologies are
- 1778 proven and commercially available for coal fired power plants
- 1779 right now. A plant owner can go out and buy them today with
- 1780 performance. Can you tell me first if you agree with that

- 1781 assessment, and then maybe elaborate on the Department's
- 1782 efforts with CCS?
- 1783 Mr. {Moniz.} Certainly. Again, the technologies are
- 1784 available today. They have all been used in a number of
- 1785 venues. And as I said earlier, as with all of our new
- 1786 technologies, we remain focused on technology development for
- 1787 further cost reduction. The--in terms of our program, we
- 1788 have right now eight major projects. And I would note that
- 1789 most of them are actually CCUS where the U is for utilization
- 1790 of the carbon dioxide, in this case through enhanced oil
- 1791 recovery, which obviously then gives you a monetary return
- 1792 for the CO2.
- 1793 Mr. {Doyle.} But isn't it true that in certain parts of
- 1794 the country, that is just not possible because--shared oil
- 1795 there?
- 1796 Mr. {Moniz.} Correct. Sure. So that is not--and that
- 1797 is--in fact, in particular it is no accident that the--of the
- 1798 eight major projects that we have, the two that do not have
- 1799 utilization are in Illinois where that is not such an
- 1800 attractive option.
- 1801 Mr. {Doyle.} Yes.
- 1802 Mr. {Moniz.} Although I might say there have been many
- 1803 interesting discussions about if and when one goes to a
- 1804 system with lots of capture plants around the country,

- 1805 including in the Midwest and western Pennsylvania, et cetera,
- 1806 that there is a lot of interest in building an infrastructure
- 1807 of CO2 that would go down to the Gulf and then over towards
- 1808 the Rocky Mountains to have a major CO2 infrastructure.
- 1809 Mr. {Doyle.} Do you think--
- 1810 Mr. {Moniz.} That is in the future.
- 1811 Mr. {Doyle.} Do you think though that CCS technology in
- 1812 areas like western Pennsylvania where there isn't oil to
- 1813 recover--if there isn't a recovery part to help pay for the
- 1814 costs that it is still economically and commercially viable
- 1815 in those areas?
- 1816 Mr. {Moniz.} Well, look. I think we are going to have
- 1817 to keep working to again to drive costs down. And besides
- 1818 the demonstration projects today, which are using basically
- 1819 today's technology, we also have--including in RPE, et
- 1820 cetera, programs to look at new technologies that can have
- 1821 substantially lower costs. I think we are at the--you know,
- 1822 I mean the research program for these novel technologies,
- 1823 next generation technologies, is in a very early stage.
- 1824 Mr. {Doyle.} Yeah. Mr. Secretary, thank you. I think
- 1825 that CCS is a key to the Administration's all of the above
- 1826 strategy if we are going to have one.
- 1827 Mr. {Moniz.} It is.
- 1828 Mr. {Doyle.} And I would encourage you to keep the

- 1829 investments going. Thank you.
- 1830 Mr. {Moniz.} Yeah. We will.
- 1831 Mr. {Whitfield.} At this time, I recognize the
- 1832 gentleman from Texas, Dr. Burgess, for 5 minutes.
- 1833 Mr. {Burgess.} Thank you, Mr. Chairman. Mr. Secretary,

82

- 1834 thank you so much for being here and your forbearance today.
- 1835 Let us stay on the all of the above strategy concept for just
- 1836 a moment. I think we have a slide that shows the Office of
- 1837 Energy Efficiency and Renewable Energy in comparison to other
- 1838 aspects of the--of your energy budget.
- 1839 [Slide]
- 1840 And it is--looking at the bar graph, it is pretty--it is
- 1841 hard to read the writing. But ERE is the big one. And
- 1842 everything else are the small ones. So ERE just absolutely
- 1843 overwhelms like nuclear energy, more traditional fossil
- 1844 energy and more traditional sources of energy. So it seems
- 1845 like the Office of Nuclear Energy, Fossil Energy and
- 1846 Electricity would have critical roles to play in shaping the
- 1847 future energy policy of the United States. Would--is that a
- 1848 fair statement?
- 1849 Mr. {Moniz.} It is. I could comment on the graph,
- 1850 however, and note that EERE, we might think as two programs,
- 1851 efficiency and renewables.
- 1852 Mr. {Burgess.} And I am glad you brought that up,

- 1853 because I wished you would. And I believe in energy
- 1854 efficiency.
- 1855 Mr. {Moniz.} Right.
- 1856 Mr. {Burgess.} And sometimes coupling it with renewable
- 1857 energy in fact distracts us from the validity and the
- 1858 importance of energy efficiency.
- 1859 Mr. {Moniz.} Right.
- 1860 Mr. {Burgess.} No one of either political party is
- 1861 going to run on a platform of wasting energy.
- 1862 Mr. {Moniz.} Um-hum.
- 1863 Mr. {Burgess.} So energy efficiency is one of the
- 1864 things that I should think we should put high on our list.
- 1865 So in fact for future graphs, I would appreciate the ability
- 1866 to tease out what is renewable energy and what are the gains
- 1867 that we can have from expanded energy efficiency.
- 1868 Mr. {Moniz.} And--
- 1869 Mr. {Burgess.} You were starting to answer. I will let
- 1870 you finish.
- 1871 Mr. {Moniz.} And I want to let you know, I am just
- 1872 going to add that in the budget request for fiscal year 2015,
- 1873 in fact, energy efficiency is actually the largest of the
- 1874 proposed increases.
- 1875 Mr. {Burgess.} Let us--and will you be able to--can you
- 1876 provide us those figures?

- 1877 Mr. {Moniz.} Sure.
- 1878 Mr. {Burgess.} Okay. Thank you. And we don't need to
- 1879 go into it now, but if you could make that available? I
- 1880 think that would be helpful. And I have got a series of
- 1881 questions that might in fact then not be necessary looking at
- 1882 those numbers. I have got some questions. The homebuilders
- 1883 back home are really concerned. You have got energy building
- 1884 codes that were developed by the Department of Energy and
- 1885 authorized to serve as the technical advisor during the
- 1886 development of the codes. Your role has expanded over time.
- 1887 And now, it has almost moved into the point of advocacy. The
- 1888 Department of Energy representatives even pursue what is a
- 1889 very aggressive energy goals that actually increase the cost
- 1890 of housing by having to meet these requirements. Is that
- 1891 something that you are willing to take a look at?
- 1892 Mr. {Moniz.} I--yes. I am not familiar with that. I
- 1893 will look at it.
- 1894 Mr. (Burgess.) I can provide you information that has
- 1895 been provided to me by homebuilders in north Texas.
- 1896 Mr. {Moniz.} That would be--
- 1897 Mr. {Burgess.} But apparently, it has been--the
- 1898 requirements have been out there for some time. The world
- 1899 has changed around them. But the net effect is we are
- 1900 expending a lot of money to meet those requirements on

- 1901 technologies that aren't adding that much to energy
- 1902 efficiency but really do drive the cost of construction when
- 1903 other things might be a more reasonable expenditure. So I
- 1904 will make that information available to your office.
- 1905 Mr. {Moniz.} Thank you.
- 1906 Mr. {Burgess.} And I would appreciate your response on
- 1907 that.
- 1908 Mr. {Moniz.} Okay.
- 1909 Mr. {Burgess.} Thank you, Mr. Chairman. With that, I
- 1910 am going to yield back.
- 1911 Mr. {Whitfield.} The gentleman yields back. At this
- 1912 time, I will recognize the gentlelady from the Virgin
- 1913 Islands, Dr. Christensen, for 5 minutes.
- 1914 Mrs. {Christensen.} Thank you, Mr. Chairman. And
- 1915 welcome, Mr. Secretary. We are really excited to have you
- 1916 here to discuss the 2015 budget for the Department of Energy.
- 1917 In order to meet the President's clean energy targets by
- 1918 2020, we must continue to support the development and the
- 1919 deployment of new innovative clean energy technologies, but
- 1920 we also much encourage initiatives that support families to
- 1921 make any change that they can at the household level to make
- 1922 to increase efficiency. So I am pleased to see that the
- 1923 weatherization assistance program has been designated a 31
- 1924 percent increase in funding. And I hope this continues to be

- 1925 a priority item as it serves critical needs in my district
- 1926 where residential rate pairs are charged over 51 cents per
- 1927 kilowatt and commercial over 55 cents. And I know you have
- 1928 heard me say that before.
- 1929 The weatherization program allows our local energy
- 1930 office to assist low-income families to reduce their energy
- 1931 costs by providing new efficient refrigerators, solar water
- 1932 heaters, air conditioning, different bulbs and similar
- 1933 improvements which may seem small for some but go a long way
- 1934 in our small and tightknit communities. It is also a great
- 1935 benefit to the local vendors that provide the products and
- 1936 service for the program.
- 1937 The state energy program is another key program that we
- 1938 really depend on a lot to provide energy programs for the
- 1939 general public, and we want to thank--I want to thank you for
- 1940 your support of these two important programs.
- 1941 I want to go back to climate change for a minute. And
- 1942 much has been said about the intergovernmental panel on
- 1943 climate change and their new report that was reported earlier
- 1944 this week that described the impact of climate change on our
- 1945 natural environment but also warns about the impacts on human
- 1946 health and safety. The scientists identified several key
- 1947 risks. One is risk of death, injury, ill-health or
- 1948 disruptive livelihoods in low-lying coastal zones and small

- 1949 island developing states like mine, and other small islands
- 1950 due to storm surges, coastal flooding and sea level rise.
- 1951 When I was here earlier, you talked about the threats to
- 1952 utilities and water supplies. Mr. Secretary, would you agree
- 1953 that the potential impacts of climate change pose a human
- 1954 health and safety risk to people who live along coastal areas
- 1955 or islands as well?
- 1956 Mr. {Moniz.} Certainly. And islands of course are
- 1957 often quite exposed. Um-hum.
- 1958 Mrs. {Christensen.} Yes. Periods of extreme heat pose
- 1959 public health risks, too. How worried should we be that heat
- 1960 waves resulting from--about the heat waves resulting from
- 1961 unchecked climate change?
- 1962 Mr. {Moniz.} Well, again, I think what we see are more
- 1963 extremes, both hot and cold. We also have the polar vortex,
- 1964 in fact, recently.
- 1965 Mrs. {Christensen.} Yes. And the IPPC report also
- 1966 warns that extreme weather events, as you said, will become
- 1967 more frequent as the climate warms, will damage
- 1968 infrastructure and critical services. Given all of these
- 1969 potential impacts, would you characterize climate change as
- 1970 also a critical public health challenges, not only an
- 1971 environmental challenge?
- 1972 Mr. {Moniz.} Yes, it is an environment, economy, health

- 1973 and security challenge.
- 1974 Mrs. {Christensen.} Okay. A lot of times when we talk
- 1975 about, you know, moving to a greener economy and renewable
- 1976 fuels, the talk is about the cost and jobs and economic
- 1977 damage. But we never take into account the public health
- 1978 cost. And so I just wanted to focus on public health in my
- 1979 questioning.
- 1980 Mr. {Moniz.} Um-hum.
- 1981 Mrs. {Christensen.} Thank you, Mr. Secretary. And
- 1982 thank you for being here.
- 1983 Mr. {Whitfield.} The gentlelady yields back. At this
- 1984 time, I will recognize the gentleman from Louisiana, Dr.
- 1985 Cassidy, for 5 minutes.
- 1986 Mr. {Cassidy.} Thank you, Mr. Chairman. Mr. Moniz, how
- 1987 are you?
- 1988 Mr. {Moniz.} Hello.
- 1989 Mr. {Cassidy.} Listen. In am following up with
- 1990 something that Mr. Hall asked earlier regarding the offshore
- 1991 deep water port facilities for liquefied natural gas. Now,
- 1992 as I am told--I was in another meeting. I was told that you
- 1993 had mentioned kind of a lack of familiarity with it, but you
- 1994 would look into it. Now, my concern is that I have here a
- 1995 letter dated October the 18th, 2013, from Mr. Jonathan Levy,
- 1996 Deputy Chief of Staff of the Office of the Secretary of the

- 1997 DOE, and he was requesting that the -- that there would be a 1998 parallel process to review these offshore LNG terminals as 1999 opposed to the FERC terminals. Now, since we are looking to 2000 see how we can expedite the approval of these processes, and 2001 I gather in the FERC process, whichever comes off next is the 2002 one that you review next, clearly, we have something which is 2003 outside FERC. It is a parallel agency. And this seems 2004 something that again the secretary suggested that you all 2005 would set up the parallel process.
- 2006 So with that introduction, it is kind of troubling to me that you would not be familiar with it. It tells me that if 2007 2008 the letter came October 18--and it refers actually to another 2009 letter from 2012--that this would not be a priority for your 2010 agency. And if it is not a priority, it is probably not 2011 going to happen. Can you reassure me regarding my concerns? 2012 Mr. {Moniz.} And as I said to Mr. Hall, I think, I will 2013 certainly go back and look at this whole issue of the MARAD 2014 approvals in the queue.
- Mr. {Cassidy.} Yeah, if you could, because, frankly, it seems like a parallel process is indicated, particularly if we are trying to make export of LNG a priority. And, again, my concern, the fact that it is kind of an unknown issue suggests that it is not a priority. Those are jobs in my state.

- 2021 Mr. {Moniz.} No. To be clarify--I mean, I am certainly
- 2022 aware of the issue of the MARAD approvals in lieu of FERC
- 2023 approvals for that. I am just--I just have to go back and
- 2024 look at where we stand in that discussion.
- 2025 Mr. {Cassidy.} Okay.
- 2026 Mr. {Moniz.} I don't want to give misinformation.
- 2027 Mr. {Cassidy.} Okay. Thank you. Let me change gears
- 2028 to mixed oxide fuel fabrication. Does that plant on the--in
- 2029 South Carolina, I gather that the Department of Energy is
- 2030 seeking to put in I would call it mothball. I think it is
- 2031 called cold standby. Now, it is my understanding that this
- 2032 was not supposed to be done because Congress had indicated
- 2033 that this process should be created, that we are now 60
- 2034 percent through with the process and it is going to cost a
- 2035 certain amount of money to put it in cold standby that
- 2036 actually could be used for the completion of the project. So
- 2037 if--but again, I gather that it is being shut down, if you
- 2038 will, because if your concerned about the cost. Can you give
- 2039 us that cost analysis to put the facility into the cold
- 2040 shutdown? How much will it cost to do so?
- 2041 Mr. {Moniz.} Oh, well, first of all, there are several
- 2042 analyses about the large lifecycle cost, which are frankly
- 2043 all converging to this 30 billion dollars or so.
- 2044 Mr. {Cassidy.} Now, I am told there is a--

- 2045 Mr. {Moniz.} Like--
- 2046 Mr. {Cassidy.} I am sorry. I don't--limited time. I
- 2047 am sorry. I am told there is a GAO report that pegs it at 24
- 2048 billion.
- 2049 Mr. {Moniz.} Yeah. So the GAO said 24 billion. But it
- 2050 acknowledged that it had left things out and suggested it was
- 2051 likely to be higher. And so I think I would put them and the
- 2052 DOE analysis and the Army Corps of Engineer analysis of the
- 2053 facility are all consistent in terms--
- 2054 Mr. {Cassidy.} Now, I am told that that Army Corps
- 2055 analysis is not yet public. Are--is that going to be made
- 2056 public?
- 2057 Mr. {Moniz.} I anticipate it will be. Yes. It was not
- 2058 full lifecycle. That was for the capital facility.
- 2059 Mr. {Cassidy.} Uh-huh.
- 2060 Mr. {Moniz.} But on that part, it was in line--in fact,
- 2061 a little bit higher than our estimate. So again, the
- 2062 approach was that 30 billion dollar lifecycle looks like
- 2063 pretty hard to sustain. So we felt that in the fiscal year
- 2064 2015 budget, we proposed roughly 220 million dollars for
- 2065 options analysis to make sure in the end the Administration
- 2066 and the Congress have got to--we have to come together to
- 2067 decide, you know, how are we going to dispose of this
- 2068 plutonium. Is a 30 billion dollar project the way to go?

- 2069 The standby--
- 2070 Mr. {Cassidy.} So is there--I am almost out of time.
- 2071 So if there is an alternative, has the alternative been
- 2072 identified? And if so, what would be the lifecycle cost of
- 2073 the alternative?
- 2074 Mr. {Moniz.} There was a National Academy report in the
- 2075 1990s that identified 31 alternatives. We have restricted
- 2076 that to four or five. Some are reactor alternatives. Some
- 2077 are non-reactor alternatives. Our initial look suggests that
- 2078 some of these are as expensive, but some may not be. So that
- 2079 is what we need to work up and come to the Congress with in
- 2080 terms of the path forward. We want to make sure that in the
- 2081 standby, nothing is irreversible, because MOX remains an
- 2082 option in the suite.
- 2083 Mr. {Cassidy.} Okay. I am out of time. I yield back.
- 2084 Thank you.
- 2085 Mr. {Whitfield.} AT this time, the Chair recognizes the
- 2086 gentleman from Texas, Mr. Olson, for 5 minutes.
- 2087 Mr. {Olson.} I thank the Chair. And welcome back,
- 2088 Secretary Moniz.
- 2089 Mr. {Moniz.} Thank you.
- 2090 Mr. {Olson.} My questions today will focus on the
- 2091 nuclear power workforce, grid challenges during disasters
- 2092 and, for a change, LNG exports.

2093 First, the energy nuclear power workforce. The South 2094 Texas Project in Bay City, Texas, is key to the Gulf Coast 2095 grid. It provides reliable, affordable power to the entire 2096 Houston area. It has been doing that since 1988. However, 2097 STP is dealing with an aging workforce. Workers are 2098 retiring, and there aren't enough qualified replacements. 2099 Now, Wharton County Junior College is stepping up to the 2100 challenge, led by the great president, Betty McCrohan. 2101 Wharton has opened a fourth campus in Bay City. And with the 2102 help of the Matagorda County Judge, Nate McDonald, they are 2103 offering two-year degrees, Associate Degrees, in three 2104 nuclear power specialties. I would love to have you come 2105 down and see that facility some time, if you are going by the 2106 South Texas plant. 2107 But nationally, nuclear power workers in stem aren't as 2108 exciting as four-year--degrees. And that concerns me. I am 2109 proud. I graduated from ICE University and from UT Law 2110 School. But lawyers like me who never practice law and--2111 majors are great with pens and paper but terrible with fixing 2112 combined cycle gas turbines. And so my question is, what do 2113 you see when we look at our energy workforce? Is there 2114 anything DOE can do in its budget relating to finding the 2115 next generation of scientists, engineers or high-tech 2116 construction workers?

- 2117 Mr. {Moniz.} Well, we--I think, you know, we do have
- 2118 somewhat limited authorities in terms of, you know, direct
- 2119 educational programs. But I think this issue of workforce in
- 2120 a number of areas are relevant--are of relevance to the
- 2121 Department's missions. It is a major challenge. By the way,
- 2122 we have the same issue in some of our laboratories in terms
- 2123 of the nuclear workforce. So we would like to work to find
- 2124 ways to focus on core disciplines--core areas of relevance to
- 2125 the energy space where we might look at increasing things
- 2126 like internship programs, traineeship programs, that kind of
- 2127 activity. Because I agree. In fact, Mr. Rush mentioned
- 2128 earlier in terms of the minorities in energy, it is--we are
- 2129 not--we need more people coming into the workforce. And that
- 2130 is only going to be helped if we work across the entire
- 2131 spectrum, gender, race, et cetera. So I would love to work--
- 2132 I would be happy to work with you. And--
- 2133 Mr. {Olson.} By yourself or--
- 2134 Mr. {Moniz.} I would sent Pete Lyons up to see you.
- 2135 Mr. {Olson.} There you go. Send him down there to Bay
- 2136 City, Texas.
- 2137 Mr. {Moniz.} Great.
- 2138 Mr. {Olson.} My second question is about grid recovery
- 2139 and disaster. The 2014 hurricane season starts June 1. My
- 2140 hometown of Houston, the whole area is in Hurricane Alley.

- 2141 As we have seen, the grid can be very vulnerable in severe
- 2142 weather. Keeping lights and air conditioning on should be a
- 2143 top priority for all of us. When Hurricane Ike hit in 2008,
- 2144 2 million people lost their power. DOE's budget has some
- 2145 priorities I think are interesting. You want to spend five
- 2146 times the amount on wind energy, 115 million. Then on energy
- 2147 infrastructure security and restoration, 22.6 million.
- 2148 Texans love wind. We are the number one proofs of wind in
- 2149 America. But we also remember America's most disastrous
- 2150 hurricane, the Galveston Hurricane of 1900 when over 6,000
- 2151 people, minimum, were killed. Should I be concerned by DOE's
- 2152 priorities here?
- 2153 Mr. {Moniz.} Well, I think frankly we are trying to
- 2154 ramp up our emergency response capability, and also our what
- 2155 you might call prevention possibility through looking at--to
- 2156 make our infrastructure more resilient so that if something
- 2157 does happen, it doesn't go down. Or if it goes down, it
- 2158 comes back faster. So that is a big focus of us--for us.
- 2159 We--again, we have some specific proposals in the fiscal year
- 2160 2015 budget to amplify these capacities. One is to have a
- 2161 dedicated energy infrastructure response center. It is--I
- 2162 forget, it is 6 or 8 million dollars proposal to outfit a
- 2163 place where we can look at the country's infrastructure and
- 2164 help us in directing federal assets to assist with recovery.

- 2165 We also propose to place one person in each of the FEMA
- 2166 districts to understand the region specific issues with
- 2167 regard to risks. And we feel that, you know, that having a
- 2168 person embedded in that way, you really understand the local
- 2169 situation, and you can understand who to call quickly. Where
- 2170 there are problems, you could do training, all kinds of
- 2171 things. So those are two specific initiatives on emergency
- 2172 response. But in addition, in the quadrennial energy review,
- 2173 there is basically going to be two major focuses. One is
- 2174 electricity system, and the other one is the fuels
- 2175 infrastructure. And on the latter, for sure, we are going to
- 2176 do region by region analyses of the--of resilient fuels
- 2177 infrastructure, because we have seen different problems in
- 2178 all different parts of the country. Just recently, the
- 2179 propane for example in the--especially in the upper-Midwest,
- 2180 although it went to other parts of the country as well.
- 2181 So we really are building in this area. We think it is
- 2182 a high priority.
- 2183 Mr. {Olson.} Come see Wharton County Junior College, my
- 2184 friend. I yield back.
- 2185 Mr. {Whitfield.} At this time, I recognize the
- 2186 gentleman from West Virginia, Mr. McKinley, for 5 minutes.
- 2187 Mr. {McKinley.} Thank you, Mr. Chairman. And thank you
- 2188 again, Mr. Secretary, for appearing before us. I want to

- 2189 build off a little bit of what Mr. Green--
- 2190 Mr. {Whitfield.} Would the gentleman move the
- 2191 microphone up? Yeah. Thank you.
- 2192 Mr. {McKinley.} I have to hold it, I guess. The--I
- 2193 want to build off what Doyle and Green both talked about with
- 2194 NETL and CCS. The back--so the backdrop of my question is
- 2195 going to have to do with that. There are folks that will
- 2196 contend, and maybe justifiably, that some of the climate
- 2197 change involves CO2 emissions. I am not going to disagree
- 2198 there is climate change. The question I think is how much is
- 2199 manmade. Are you with me on--
- 2200 Mr. {Moniz.} Yeah, I am trying--yeah, I think it--
- 2201 Mr. {McKinley.} How much of it is manmade. So I just--
- 2202 just looking at a chart that we put together. Yeah. Because
- 2203 the variable is the amount produced by man.
- 2204 [Chart].
- 2205 And in this chart, you see that almost 70 percent comes
- 2206 from fossil fuels of the energy produced. Now, the second
- 2207 chart shows that.
- 2208 [Chart]
- 2209 The second chart shows that very little is being spent
- 2210 in research in fossil fuels. And if that indeed is the
- 2211 problem--if fossil fuels is the problem, I don't understand
- 2212 why there is a disconnect between that and the research with

- 2213 that, because you can look at it. The research dollars is
- 2214 only around 18 percent. But more specifically, for NETL, the
- 2215 fossil energy research has been cut by over 15 percent. And
- 2216 importantly, the comment that was raised over there that
- 2217 carbon capture, one of the keys to the future of using fossil
- 2218 fuels and under some of the regulations that are being issued
- 2219 by the EPA, they have cut the research money in carbon
- 2220 capture by 16 percent. They have cut the -- on carbon storage
- 2221 by 26 percent. If we are serious about trying to include
- 2222 fossil fuels in our energy matrix, I think someone is being
- 2223 disingenuous about their interest in all of the above. And
- 2224 rather, there truly is this war on coal. So is this--are we-
- 2225 -do you think the President is deliberately trying to
- 2226 discredit or diminish the use of coal in America?
- 2227 Mr. {Moniz.} Again, in terms of the R&D numbers for
- 2228 example, again, I respectfully feel that this does not give
- 2229 the full picture. I mean, the--this Administration is
- 2230 unprecedented in its investments in coal, CCS in particular--
- 2231 CCUS, with 6 billion dollar.
- 2232 Mr. {McKinley.} Okay. Then why do we see cuts of 40
- 2233 and 40 some percent with NETL? That is--
- 2234 Mr. {Moniz.} But 6 billion dollars in CCUS. And right
- 2235 now, an active loan program solicitation of 8 billion dollars
- 2236 for fossil fuels generally. I can't get into the specifics

- 2237 of some of the initial proposals. It is a rolling--there
- 2238 will be more proposals.
- 2239 Mr. {McKinley.} Mr. Secretary--
- 2240 Mr. {Moniz.} But there is coal--
- 2241 Mr. {McKinley.} You can appreciate, we have that 5
- 2242 minute drill we have to--we have limited ability to ask
- 2243 enough questions here. But the--my focus again is over NETL.
- 2244 It is providing increase research dollars into NETL. And I
- 2245 think it sends a message to the laboratories, both in
- 2246 Pennsylvania and West Virginia, that we are serious about
- 2247 them, whether that is a chemical loop, whether that is a
- 2248 fracking techniques, and all the things that have been
- 2249 developed at NETL that they will continue, that they can
- 2250 count on, that their employment is secure.
- 2251 Mr. {Moniz.} Um-hum.
- 2252 Mr. {McKinley.} I think it also sends a message if we
- 2253 split the proper amount of money in NETL. We are sending a
- 2254 strong message to the coalminers all across America in the
- 2255 coalfields that their jobs are secure, that there is a future
- 2256 for coalmining. And it just eliminates the uncertainty. I
- 2257 am--I use that backdrop as--for NETL. But also if we
- 2258 continue this attack on coal and fossil fuels, and not put
- 2259 the money into the research, if we de-carbonize America, do
- 2260 you really think the health of the world will improve that

- 2261 much if America alone, by itself, were to not burn fossil
- 2262 fuels? Do you think the health of the world would be better?
- 2263 Mr. {Moniz.} Well, first, let me say, I will go back
- 2264 and look at the NETL program specifically. Number two, I--as
- 2265 mentioned earlier, things like methane hydrates, I think we
- 2266 tripled, which will be a NETL interest.
- 2267 Mr. {McKinley.} Sure.
- 2268 Mr. {Moniz.} Third, on the last question, we all
- 2269 recognize that obviously the United States alone cannot
- 2270 change the trajectory. But what we do is very, very
- 2271 important. And I think, and the President feels--
- 2272 Mr. {McKinley.} But wouldn't the other nations--
- 2273 Mr. {Moniz.} And we will share leadership here.
- 2274 Mr. {McKinley.} But, Mr. Secretary, the other nations
- 2275 aren't following us. Germany is building more coal fire
- 2276 power houses. So my message is until we get a global
- 2277 unanimous effort to try to do this, why do we continue to
- 2278 attack our coal industry and diminish it and cause
- 2279 uncertainty with it? I am past my time. I am sorry. And I
- 2280 would go back to--
- 2281 Mr. {Moniz.} Again, I would just say that we are making
- 2282 unprecedented investments in coal, huge in scale.
- 2283 Mr. {Whitfield.} The gentleman's time has expired. At
- 2284 this time, I will recognize the gentleman from New York, Mr.

- 2285 Engel, for 5 minutes.
- 2286 Mr. {Engel.} Well, thank you very much, Mr. Chairman.
- 2287 Thank you, Mr. Secretary. I just want to first say that
- 2288 overall I am satisfied with the President's fiscal year 2015
- 2289 budget, the Department of Energy. At a time of significant
- 2290 alarm over climate change, I am encouraged that the budget
- 2291 request offers a 2.6 increase above fiscal year 2014. And I
- 2292 am particularly interested in the budgeting for alternative
- 2293 transportation fuels. I want to commend you and the
- 2294 President for proposing a 2 billion set aside for an energy
- 2295 security trust, as well as other investments in alternative
- 2296 fuels and energy efficiency.
- 2297 For many years, I have introduced the Open Fuel Standard
- 2298 Act just recently with my colleague from Florida, Ileana Ros-
- 2299 Lehtinen. I have done this for the past several years with
- 2300 bipartisan support from this Committee. And I do believe
- 2301 that this legislation will drive--help drive domestic
- 2302 production of all types of alternative fuels, while
- 2303 decreasing our reliance on foreign oil from hostile regimes.
- 2304 And it has also been the goal of my oil and national security
- 2305 caucus, which is focused on ways to reduce our dependence on
- 2306 foreign oil while making the U.S. energy independent.
- So, Mr. Secretary, in the past, you have mentioned
- 2308 electric vehicles. Can you expand on what other types of

- 2309 alternative fuels you foresee being developed and funded
- 2310 through the energy security trust?
- 2311 Mr. {Moniz.} Well, I think the--first of all, with
- 2312 regard to vehicles, let us say very broadly, I think there
- 2313 are three major thrusts on what we are trying to accomplish.
- 2314 One is efficiency vehicles. Second is alternative fuels.
- 2315 The open fuel standard would be--fit in there, of course.
- 2316 And third, electrification. And we think they are all
- 2317 important directions, and in fact can work together. So on
- 2318 the electric vehicles, if you want to focus on that first, we
- 2319 of course are continuing the battery research. But issues
- 2320 such as light-weighting have very, very important
- 2321 implications for electric vehicles because of range issues,
- 2322 et cetera. So we are pushing on that. And yesterday, we had
- 2323 a discussion with the auto suppliers of the United States in
- 2324 terms of the advanced vehicle--advanced technology vehicle
- 2325 program at DOE. And they are noted that much of the--almost
- 2326 any plugin hybrid sold in--anywhere has some DOE driven
- 2327 technology in it. And this provides new opportunities for
- 2328 our suppliers.
- 2329 Mr. {Engel.} Thank you. I want to just make a couple
- 2330 of statements about some things pertaining to New York. And
- 2331 you could submit it to me, because we only have 5 minutes. I
- 2332 know there is not time. But, obviously, about Hurricane

- 2333 Sandy is something that we are still feeling the pangs of in
- 2334 the northeast. During that hurricane or super storm,
- 2335 significant fuel supply shortages in New York City area were
- 2336 caused by damages to supply train components in New Jersey.
- 2337 And the City and State have no authority--regulatory
- 2338 authority to intervene, and it has caused problems. I am
- 2339 told New York City requested that DOE and the National
- 2340 Petroleum Counsel to convene a regional working group to
- 2341 develop a strategy for securing physical infrastructure like
- 2342 pipelines, refineries and terminals. So I am wondering if
- 2343 you could submit to me--you don't have to do it now--an
- 2344 update on the status of the working group and its findings.
- 2345 And I also would like to ask you to have the Agency follow-up
- 2346 with my office and the City to discuss the findings, and to
- 2347 address some of the jurisdictional concerns that took place
- 2348 after the storm.
- 2349 Mr. {Moniz.} Certainly. I charged the National
- 2350 Petroleum Counsel last October to do this fuel resiliency
- 2351 studies. And it will involve as well these issues of
- 2352 authorities and seams in gaps of authorities. So that is
- 2353 very important. And we will get back to you--to your office.
- 2354 Mr. {Engel.} Thank you. And, finally, I just want to
- 2355 mention the whole issue of fracking and with the difficulties
- 2356 we are having with Russia bullying all the neighboring

- 2357 countries, whether the United States should export natural
- 2358 gas and other such things. Can you address what steps DOE is
- 2359 taking to deal with environmental concerns that are a result
- 2360 of fracking, such as methane leaks and groundwater
- 2361 contamination? People in my district get very nervous about
- 2362 it. I have spoken with the people that do this. And they,
- 2363 you know, assure me. I have been to Alberta. I have been to
- 2364 North Dakota. And they assure us that there is no damage of
- 2365 any contamination. Can you tell us what your observations
- 2366 are?
- 2367 Mr. {Moniz.} Well, we have been I think consistently
- 2368 stating that the environmental--the footprint issues of
- 2369 production, they are challenging but they are manageable.
- 2370 The issue is you have to manage them. And we still think
- 2371 there are ways to go. For example, our Secretary of Energy
- 2372 Advisory Board just last Friday, I think it was, finalized a
- 2373 report on--called Frack Focus, looking at the issues of
- 2374 disclosures of chemicals, et cetera, et cetera. And while,
- 2375 you know, it gave some credit for progress, it also pointed
- 2376 out many areas of possible improvement. So what we are doing
- 2377 is, whether it is research or it is on issues like this where
- 2378 we are trying to push for a continuous improvement, best
- 2379 practices is absolutely critical in all cases. So,
- 2380 obviously, it has been a big boom to our economy. It will

- 2381 continue to be one. But we need to keep working on the
- 2382 footprint. And the methane--and the last--we have an
- 2383 interagency methane strategy where again we will have a lot
- 2384 of responsibilities, not only in production but in things
- 2385 like mid and downstream gas transportation.
- 2386 Mr. {Engel.} Thank you.
- 2387 Mr. {Whitfield.} The gentleman's time has expired.
- 2388 Mr. {Engel.} Thank you, Mr. Chairman.
- 2389 Mr. {Whitfield.} At this time, I will recognize the
- 2390 gentleman from Illinois, Mr. Kinzinger, for 5 minutes.
- 2391 Mr. {Kinzinger.} Thank you, Mr. Chairman. Mr.
- 2392 Secretary, thank you for being here, and thanks for serving
- 2393 your country.
- 2394 In 2010, the National Insulation Association, in
- 2395 conjunction with the Department of Energy, estimated that the
- 2396 simple maintenance of mechanical insulation in industrial and
- 2397 manufacturing plants could deliver 3.7 billion in energy
- 2398 savings every year. In today's budget climate, would you
- 2399 agree that it makes sense to pursue cost saving measures such
- 2400 as the increase use and maintenance of mechanical insulation
- 2401 in federal buildings and facilities to help save hardworking
- 2402 taxpayer dollars and overall energy consumption?
- 2403 Mr. {Moniz.} Absolutely. Efficiency of buildings is a
- 2404 major opportunity.

- 2405 Mr. {Kinzinger.} Has your Agency, through its federal
- 2406 energy management program or any other program, ever
- 2407 evaluated the potential energy savings available to federal
- 2408 agencies through the greater utilization or upgrading to
- 2409 mechanical insulation in federal facilities?
- 2410 Mr. {Moniz.} I don't know the answer to that question,
- 2411 but I will find it.
- 2412 Mr. {Kinzinger.} Okay.
- 2413 Mr. {Moniz.} If I could get back to you--
- 2414 Mr. {Kinzinger.} Well, would you commit to evaluating
- 2415 the potential source, the energy savings?
- 2416 Mr. {Moniz.} Yes.
- 2417 Mr. {Kinzinger.} Mr. Secretary, as we have seen in this
- 2418 Committee and others, Russia has been energy--wielding its
- 2419 energy prowess on the world stage for some time now. Not
- 2420 only do they supply the majority of natural gas to our
- 2421 European allies, but they are also exporting their nuclear
- 2422 technology at a rapid pace. In fact, I was recently in
- 2423 Hungary. And they signed another agreement with the Russians
- 2424 in terms of nuclear production. In fact, Russia has either
- 2425 built or is in the process of building 36 reactors around the
- 2426 world. The last time we had a chance to talk on this
- 2427 Subcommittee, I expressed my concerns that a vacuum of U.S.
- 2428 nuclear energy exports would occur in the very near future if

- 2429 your Agency did not set out clear and concise guidelines to
- 2430 push forward an effective nuclear energy policy. I believe
- 2431 the U.S. should be the leader in the realm of nuclear
- 2432 expertise. But Russia's influence in nuclear energy exports,
- 2433 and therefore their geopolitical influence, seems to be
- 2434 expanding beyond ours. What are you doing, and your Agency
- 2435 doing, to reestablish our competitiveness in this area?
- 2436 Mr. {Moniz.} Well, it is a whole variety of things.
- 2437 One is we did provide a loan guarantee for the new AP1000
- 2438 construction reactors in Georgia. We are pursuing of course
- 2439 R&D. But in addition to that, I might say on a very
- 2440 different vein, we do do--when sanctioned by the government,
- 2441 we have been very active in promoting U.S. technology abroad,
- 2442 including quite recently the--I think there is a lot of
- 2443 promise for both Westinghouse and GE technologies right now
- 2444 abroad. The fact that we are building in this country makes
- 2445 a huge difference in terms of being able to promote the
- 2446 technology. China is building a whole bunch of Westinghouse
- 2447 reactors. But just as one comment, Russia--you mentioned
- 2448 Russia. I would just note that in some cases, they do
- 2449 something that we can't do--
- 2450 Mr. {Kinzinger.} Right.
- 2451 Mr. {Moniz.} --which is essentially provide the
- 2452 financing and make it a turnkey operation.

- 2453 Mr. {Kinzinger.} Yeah, and I appreciate that. And I
- 2454 think that is a conversation as a Congress we have to have,
- 2455 and with the Administration in terms of that. Because,
- 2456 obviously, the Russians are providing this financial support
- 2457 for a reason, for a geopolitical advantage. So when we don't
- 2458 do things like that, or we are not competitive in this arena,
- 2459 I think it affects us geopolitically.
- 2460 As the Chairman noted earlier, and it was mentioned
- 2461 earlier, I also have concerns with your decision to stop the
- 2462 construction of the MOX plan in South Carolina. Beyond the
- 2463 concerns I have with the decision with taxpayer money sitting
- 2464 dormant on a project that is nearly 60 percent complete, I
- 2465 have concerns with the impact that this will have in the
- 2466 realm of non-proliferation with Russia. I have seen comments
- 2467 from a former Russian official who said the decision to stop
- 2468 construction of this plant is a breach of the U.S./Russian
- 2469 agreement on this issue, and that Russia may decide to go
- 2470 their own way since the U.S. is not following through with
- 2471 its end of the deal. Do you--did you consider the
- 2472 ramifications when you made this decision? If so, why? If
- 2473 not, why? And if so, do you believe this is still the
- 2474 correct path forward?
- 2475 Mr. {Moniz.} First of all, those issues were very much
- 2476 a part of the discussion. And I do want to emphasize, we

- 2477 have not cancelled the MOX project. The--
- 2478 Mr. {Kinzinger.} The Russians think we have. So--
- 2479 Mr. {Moniz.} Well, I would just say discussions with
- 2480 Russia have changed in character over the last couple of
- 2481 months.
- 2482 Mr. {Kinzinger.} Understood.
- 2483 Mr. {Moniz.} So I did discuss this with Mr. Kirienko,
- 2484 head of Rosatom, twice, as I saw the costs going up, just
- 2485 saying look, this is just a heads up kind of thing. We will-
- 2486 -I don't know where we are going with that yet. But what I
- 2487 want to emphasize is that, as I said earlier, I think the
- 2488 lifecycle cost estimates are pretty much converging to this
- 2489 kind of 30 billion dollar number.
- 2490 Mr. {Kinzinger.} Okay.
- 2491 Mr. {Moniz.} And that is a big number. And I think it
- 2492 is a collective decision about what we can do.
- 2493 Mr. {Kinzinger.} Thank you. And I will just end with
- 2494 this, over the past decade, the EEU has pursued a broad range
- 2495 of climate policies, including renewable energy subsidies for
- 2496 wind and solar power. Those climate policies have led to
- 2497 high energy costs in Europe. In fact, I had some interesting
- 2498 conversation with some CEOs of European companies. And they
- 2499 are threatening the competitiveness of many of Europe's
- 2500 energy intensive industries. I just want to say in closing,

- 2501 I hope that raises red flags with you, and you take a look at
- 2502 kind of the European experience versus ours and act
- 2503 accordingly. Thank you for your time and being here, and I
- 2504 yield back.
- 2505 Mr. {Moniz.} Thank you.
- 2506 Mr. {Whitfield.} The gentleman yields back. At this
- 2507 time, I recognize the gentleman from Virginia, Mr. Griffith,
- 2508 for 5 minutes.
- 2509 Mr. {Griffith.} Thank you, Mr. Chairman. I appreciate
- 2510 that. Thank you so much for being here, Mr. Secretary.
- 2511 The Energy Policy Act of 2005 authorized the Clean Coal
- 2512 Technology Program and certain tax credits to assist
- 2513 development of the next generation clean coal technology,
- 2514 including carbon capture and sequestration. My understanding
- 2515 of what your discussion was earlier this morning with
- 2516 Congressman Doyle was that the DOE believes these projects on
- 2517 carbon capture and sequestration that are currently ongoing
- 2518 reflect technology that is already in or demonstrated as
- 2519 viable for commercial service in coal power plants. Is that-
- 2520 -am I correct in my understanding of your previous testimony?
- 2521 Mr. {Moniz.} Yes, they are mainly using solvent
- 2522 technologies that have been used before.
- 2523 Mr. {Griffith.} So here is the Catch 22. I am not sure
- 2524 I agree with you, because also, as Congressman Doyle pointed

- 2525 out, unless you happen to be like the Mississippi facility
- 2526 right down the road from the oil well where you are going to
- 2527 use the carbon to push up the oil that they may not be
- 2528 commercially viable. But the Catch 22 is that if that is
- 2529 accurate, the statute makes it clear that you are not
- 2530 supposed to be giving them money anymore. If they are
- 2531 commercially viable now, they don't need the support from the
- 2532 tax credits. But you are still giving them the tax credits,
- 2533 are you not?
- 2534 Mr. {Moniz.} The issue is that this is a system
- 2535 integration issue pursuing a new deployment of the whole
- 2536 system. So it is I would say quite eligible.
- 2537 Mr. {Griffith.} Well, I mean the problem is it says
- 2538 that this technology has to be well beyond the level therein
- 2539 commercial service or have been demonstrated as viable for
- 2540 commercial service. So you are in a Catch 22 because if they
- 2541 are in fact viable for commercial service, as both you and
- 2542 the EPA submit--
- 2543 Mr. {Moniz.} Um-hum.
- 2544 Mr. {Griffith.} --I happen to disagree they are not
- 2545 eligible for the money. If they are commercially viable,
- 2546 they are not eligible for the money. And so I would submit
- 2547 that you all need to figure that one out, either cut the
- 2548 money off or--and say that they are commercially viable, or

- 2549 admit that they aren't commercially viable.
- 2550 Mr. {Moniz.} Well--
- 2551 Mr. {Griffith.} And I don't know that there is an
- 2552 answer necessary for that. But that is the dilemma that we
- 2553 have is that if you are following the code, which I always
- 2554 think is the right thing to do--that is why we have a
- 2555 Congress. That is why we pass laws.
- 2556 Mr. {Moniz.} Agreed.
- 2557 Mr. {Griffith.} This is why we have a Senate and a
- 2558 House that pass them, and a President that signs them.
- 2559 Mr. {Moniz.} Um-hum.
- 2560 Mr. {Griffith.} Is because we actually mean for people
- 2561 to follow them.
- 2562 Mr. {Moniz.} Um-hum.
- 2563 Mr. {Griffith.} If we follow the law, you can't have it
- 2564 both ways. You can't say they are commercially viable,
- 2565 therefore these new regs come into effect, or they aren't
- 2566 commercially viable, therefore they are eligible for the tax
- 2567 credits. I submit they are eligible for the tax credits, but
- 2568 that the EPA has got the cart before the horse and that you
- 2569 need to probably call their hand on it. That being said, let
- 2570 me move on because you can't respond. And I appreciate that.
- 2571 And I understand that. I am not offended by that.
- 2572 The EIA has reported in February that the number of coal

- 2573 fired power plant retirements will be higher than originally
- 2574 anticipated, and that an estimated 60 gigawatts of coal fired
- 2575 capacity will retire by 2020. Notably, EIA expects 90
- 2576 percent of the coal fired capacity retirements to occur by
- 2577 2016. Now, this means nearly 18 percent of all coal fired
- 2578 generation in the United States will retire in the next two
- 2579 years due to new regulations. Are you concerned -- is the DOE
- 2580 concerned that the loss of these critical generation
- 2581 facilities in such a short timeframe will make it
- 2582 increasingly difficult to meet electricity demands as we move
- 2583 forward, putting reliability at risk?
- 2584 Mr. {Moniz.} First, I would just comment that I think,
- 2585 you know, the market forces with gas cannot also be dismissed
- 2586 in terms of what is happening with coal. But the analyses
- 2587 that I have seen suggest that reliability will certainly be
- 2588 preserved if this is what happens over these next years.
- 2589 Mr. {Griffith.} Well, and my concern is that I
- 2590 recognize that at some point, because of the regulations, gas
- 2591 is going to surpass coal. I may not like that, but that is
- 2592 where we are headed. And I also recognize that someday coal-
- 2593 -gas may be able to take up that slack. What I am concerned
- 2594 about is between today and that time period. I am concerned
- 2595 that next year, or in the winter of 2016, that we will see
- 2596 some real problems with this many coal plants being reduced.

- 2597 And I think that DOE ought to be concerned about that as
- 2598 well.
- 2599 Also, with all that new expenditure, closing down
- 2600 facilities--in fact, there are two different facilities--
- 2601 three different generators, but two facilities in my district
- 2602 alone that will be closing down. One of the ones that will
- 2603 close down, which is a third one I didn't--or a fourth one,
- 2604 depending on how you count them--that I didn't mention is
- 2605 converting to natural gas. But with all those expenditures
- 2606 having to be made by the power companies, it is reasonably
- 2607 expected that costs will go up as the power companies recoup
- 2608 their expenditures. Isn't that true?
- 2609 Mr. {Moniz.} I assume. I don't know the details of the
- 2610 rate case. But I assume that that would be the case.
- 2611 Mr. {Griffith.} And let me make an assumption, and you
- 2612 correct me if I am wrong. I would assume that you all are
- 2613 talking with EPA about any concerns related to reliability
- 2614 between the present and whenever natural gas can pick up the
- 2615 slack? But if we are going to lose 18 percent over the next
- 2616 2 years, that is a pretty significant cliff--
- 2617 Mr. {Moniz.} And--
- 2618 Mr. {Griffith.} --for the power companies to adjust to,
- 2619 is it not?
- 2620 Mr. {Moniz.} And with FERC.

- 2621 Mr. {Griffith.} And with FERC. Sure. But that is a
- 2622 big--that is a steep cliff, is it not? Eighteen percent of
- 2623 coal being gone when it is about 40 percent?
- 2624 Mr. {Moniz.} Well, 60 gigawatts to 2020 would be a
- 2625 substantial amount. But again, analyses that have been done
- 2626 suggest that reliability will be preserved. That is also at
- 2627 the ISO level a lot, those calculations.
- 2628 Mr. {Griffith.} I hope you are right. I yield back.
- 2629 Mr. {Moniz.} Thank you.
- 2630 Mr. {Whitfield.} The gentleman's time has expired. At
- 2631 this time, I recognize the gentleman from Colorado, Mr.
- 2632 Gardner, for 5 minutes.
- 2633 Mr. {Gardner.} Thank you, Mr. Chairman. And thank you
- 2634 to you, Mr. Secretary. And I join my colleagues in thanking
- 2635 you for your service as well.
- I have just a couple of questions for you. In May of
- 2637 last year, President Obama was quoted as saying he has to
- 2638 make an executive decision broadly about whether or not we
- 2639 export liquefied natural gas at all. What discussions have
- 2640 you had with President Obama regarding the issue of LNG
- 2641 exports?
- 2642 Mr. {Moniz.} Well, and we have discussed this,
- 2643 including recently obviously in the context of the situation
- 2644 in Europe at the moment. And at this stage, we are carrying

- 2645 through with the process and the strategy as has been
- 2646 practiced. And again, as I noted earlier, one should not
- 2647 dismiss the scale of what has already been at least
- 2648 conditionally approved prior to the FERC approval, because
- 2649 the 9.3 BCF per day is already essentially equal to the
- 2650 exports to Gutter, the world's largest LNG exporter.
- 2651 Mr. {Gardner.} But has the crisis involving Russia and
- 2652 the Ukraine influenced your decision making or your timeframe
- 2653 at all with respect to LNG exports?
- 2654 Mr. {Moniz.} A major issue there is if you look at our
- 2655 last Order, the Jordon Cove Order of last week I think it
- 2656 was, or the week before, the--there is a discussion of the
- 2657 international markets and putting LNG into international
- 2658 markets. But the major thing right now is we are going to
- 2659 have, as was announced--well, released--really announced last
- 2660 week and discussed again in Brussels yesterday, we are going
- 2661 to have, under the G7 umbrella, an energy minister's process
- 2662 that was going to look at our collective energy security.
- 2663 Mr. {Gardner.} So we are exporting our energy security
- 2664 to other nations to make that decision?
- 2665 Mr. {Moniz.} No, no, no. Quite the contrary.
- 2666 Obviously--
- 2667 Mr. {Gardner.} So the G7 will make decisions on whether
- 2668 or not we expedite LNG exports?

- 2669 Mr. {Moniz.} We are going to have a--no. We are going
- 2670 to have a meeting to discuss our collective interest in
- 2671 energy security. Now, obviously, the risks--
- 2672 Mr. {Gardner.} So we are waiting for the G7 to get back
- 2673 to us on whether or not we expedite LNG permitting?
- 2674 Mr. {Moniz.} Look, obviously, we are evaluating this
- 2675 ourselves--
- 2676 Mr. {Gardner.} But is--so are we waiting for G7
- 2677 signoff?
- 2678 Mr. {Moniz.} The process we are talking about--there
- 2679 was a meeting already yesterday. And--
- 2680 Mr. {Gardner.} Of the G7?
- 2681 Mr. {Moniz.} No. There was a meeting yesterday of ESEU
- 2682 Secretary Kerry and Deputy Secretary Poneman were there from-
- 2683 -that is from Energy--that is Poneman. And we will very soon
- 2684 be having a G7 process--
- 2685 Mr. {Gardner.} Let me just ask this, because I have a
- 2686 number of other questions, including whether or not you have
- 2687 taken the time to look at H.R. 6 in the House and whether or
- 2688 not you support the legislation making it easier to export.
- 2689 But I want to make this clear, so we are asking the G7
- 2690 whether or not it is in the world's interest to export LNG
- 2691 from the United States?
- 2692 Mr. {Moniz.} No. I did not say that. We are having--

- 2693 we will be having a discussion around the whole issues--the
- 2694 set of issues of energy security, what it means for us, what
- 2695 it means for them.
- 2696 Mr. {Gardner.} And permitting--
- 2697 Mr. {Moniz.} It is not--
- 2698 Mr. {Gardner.} Do you see issues coming out of that?
- 2699 Mr. {Moniz.} It is not an LNG export caucus.
- 2700 Mr. {Gardner.} Well, let me just ask you this then, are
- 2701 you basing determinations on LNG exports in part on those
- 2702 discussions with the G7 nations?
- 2703 Mr. {Moniz.} I would use that as an input going
- 2704 forward. Of course.
- 2705 Mr. {Gardner.} So is it the President's--is it the
- 2706 Administration's opinion that we will wait for G7 discussions
- 2707 before we approve further DOE permits?
- 2708 Mr. {Moniz.} No, I did not say that. No.
- 2709 Mr. {Gardner.} Well, I would like to know more about
- 2710 this, because I think it is alarming that we would wait for
- 2711 G7 nations for approval to export LNG.
- 2712 Mr. {Moniz.} Which is why I did not say we would wait.
- 2713 Mr. {Gardner.} You just said that part of your
- 2714 determinations would be made on discussions with G7.
- 2715 Mr. {Moniz.} As we go down the road, we--this is a long
- 2716 process.

- 2717 Mr. {Gardner.} To approve the permits is a long
- 2718 process?
- 2719 Mr. {Moniz.} Well, look, we have a public interest
- 2720 determination by law.
- 2721 Mr. {Gardner.} Should we or should we not expedite LNG
- 2722 permitting in this country?
- 2723 Mr. {Moniz.} We have been working expeditiously on a
- 2724 case by case basis, based upon substantial--
- 2725 Mr. {Gardner.} Could we do it faster than we already
- 2726 are?
- 2727 Mr. {Moniz.} --and making a public interest
- 2728 determination that we are required to make by law. If the
- 2729 law changes, we will follow the law.
- 2730 Mr. {Gardner.} Will the public interest determination
- 2731 weigh in part on the G7 discussions?
- 2732 Mr. {Moniz.} Not directly. That is our responsibility
- 2733 to do that.
- 2734 Mr. {Gardner.} But indirectly, the G7 discussions will
- 2735 weigh on a U.S. public interest determination?
- 2736 Mr. {Moniz.} Geopolitical issues have always been on
- 2737 the list of issues to address in the public interest
- 2738 determination. They are there. Now, obviously, discussing
- 2739 with our friends and allies energy security issues is part of
- 2740 a geopolitical consideration.

- 2741 Mr. {Gardner.} Is there any--
- 2742 Mr. {Moniz.} Which is balanced against things like
- 2743 domestic market considerations.
- 2744 Mr. {Gardner.} Is there anything in the law right now
- 2745 preventing DOE from a decision to approve all pending
- 2746 permits?
- 2747 Mr. {Moniz.} We--first of all, we cannot give approval
- 2748 until, at a minimum, the NEPA process is completed, which is
- 2749 at FERC.
- 2750 Mr. {Gardner.} DOE is waiting on FERC first before you
- 2751 make a decision? That is not what you mean?
- 2752 Mr. {Moniz.} Yes. The current approach is that we give
- 2753 a conditional--just to clarify. We have issued one final and
- 2754 six conditional approvals. There is only one final approval.
- 2755 That is the Sabine Pass Project in Louisiana. And they will
- 2756 start exporting in 2015. The additional six--and I have
- 2757 approved five of those--are conditional.
- 2758 Mr. {Gardner.} Conditionally--conditional.
- 2759 Mr. {Moniz.} Conditional approvals. They must also get
- 2760 NEPA process approval through FERC, although earlier--
- 2761 Mr. {Gardner.} But DOE--for your side, you don't wait
- 2762 for FERC to make their determination for your side to
- 2763 approve? You are saying that?
- 2764 Mr. {Moniz.} No. We have to wait. Yes.

- 2765 Mr. {Gardner.} Okay.
- 2766 Mr. {Moniz.} By law, we--
- 2767 Mr. {Gardner.} Right.
- 2768 Mr. {Moniz.} WE must have the environmental--the NEPA
- approval.
- 2770 Mr. {Gardner.} Right.
- 2771 Mr. {Moniz.} And just to clarify, because two other
- 2772 members mentioned this earlier, the one distinction is that
- 2773 there are now some applicants for deep water LNG. So that
- 2774 would not be FERC, but there would be an analogous MARAD
- 2775 determination that we would need to have on the environmental
- 2776 side.
- 2777 Mr. {Gardner.} I am running out of time here. In fact,
- 2778 I think I have run out of time. But another question, H.R.
- 2779 6, the Bill that we mentioned was in the House would provide
- 2780 expedited approval to World Trade Organization member
- 2781 nations. Wouldn't this Bill make your job easier and reduce
- 2782 the time required to wait for DOE, and indeed improve our
- 2783 geopolitical security around the world?
- 2784 Mr. {Moniz.} I think the choice is to Congress whether
- 2785 it wants to or not want to emphasize the public interest
- 2786 determination.
- 2787 Mr. {Gardner.} Thank you, Mr. Chairman. Thank you.
- 2788 Mr. {Whitfield.} Time has expired. At this time, I

- 2789 recognize the gentleman from Ohio, Mr. Johnson, for 5
- 2790 minutes.
- 2791 Mr. {Johnson.} Thank you, Mr. Chairman. And, Mr.
- 2792 Secretary, good to see you again.
- 2793 Mr. {Moniz.} Good to see you.
- 2794 Mr. {Johnson.} Thank you for being here. I would like
- 2795 to ask a few questions about the American centrifuge program
- 2796 in Piketon, Ohio, which I think you know is a couple of frog
- 2797 jumps away from my district border, just across the county
- 2798 line. I first want to ask you--and I think I know the answer
- 2799 to this, because I asked you this the last time you were with
- 2800 us. Do you still believe the U.S.--the United States needs a
- 2801 domestic enrichment capacity for national security purposes?
- 2802 Mr. {Moniz.} We need--for national security purposes,
- 2803 we need an American technology capacity for enrichment.
- 2804 Mr. {Johnson.} Okay. I think so, too. Over the last
- 2805 two years, the Department has invested 280 million to build,
- 2806 install and test the centrifuge machines needed to address
- 2807 this very critical national security purpose. Your
- 2808 Department actually owns the centrifuge machines and the
- 2809 support equipment. And testing over the past year has
- 2810 demonstrated its technical readiness. I understand that
- 2811 yesterday, when you testified before Energy and Water
- 2812 Development Subcommittee, you indicated that the Department

- 2813 was looking to use the transfer authority provided in the
- 2814 omnibus to fund the continued activities after the RD&D
- 2815 program concludes on April 15.
- 2816 Mr. {Moniz.} Correct.
- 2817 Mr. {Johnson.} This would avoid the major disruptions
- 2818 from job losses, industrial demobilization and operational
- 2819 stoppage, and will likely save the taxpayers money in the
- 2820 long run. I want to commend you for that--for pursuing this
- 2821 course of action. I do have a couple of questions though
- 2822 about the timing. First, the language in the omnibus states
- 2823 that before the Department can transfer the 56.65 million,
- 2824 DOE must first submit a cost benefit report on all the
- 2825 options for securing the low enriched uranium fuel needed for
- 2826 national security purposes and your preference. And most
- 2827 importantly, that report must cite--or must sit with the two
- 2828 relevant appropriation subcommittees for 30 days and receive
- 2829 their approval before you can initiate the transfer. So the
- 2830 clock must run for at least 30 days, but the current funding
- 2831 for the enrichment activities expires April 15. So you can
- 2832 see mine and others concerns with regards to the timing.
- 2833 First, how are you going to fund the continued operations
- 2834 after April 15 until the report has made it through the
- 2835 appropriations subcommittees?
- 2836 Mr. {Moniz.} We are working that assiduously at the

- 2837 moment. We think we can get through this.
- 2838 Mr. {Johnson.} But you are determined to get through
- 2839 it?
- 2840 Mr. {Moniz.} That is absolutely the intent.
- 2841 Mr. {Johnson.} Okay. Second, I know that yesterday you
- 2842 said your Department was working to expeditiously work to
- 2843 finish the report. But can you give us any more precise
- 2844 timeline on when the Department's cost benefit report and
- 2845 reprogramming request might be sent to Congress?
- 2846 Mr. {Moniz.} I would prefer to check back with the
- 2847 people and get--I can get back to you shortly after this--
- 2848 Mr. {Johnson.} Can you get back to me on--
- 2849 Mr. {Moniz.} Yes.
- 2850 Mr. {Johnson.} Okay. Thank you. Finally, I understand
- 2851 that there is about 10 million of funding that remains
- 2852 available for you to use from the 62 million that Congress
- 2853 appropriated in the fiscal year 2014 omnibus. Are you
- 2854 prepared to utilize those funds to continue operations and
- 2855 avoid a major disruption in the program to cover the gap
- 2856 until the transfer authority is received?
- 2857 Mr. {Moniz.} As I said, I think we have ways of getting
- 2858 through this period.
- 2859 Mr. {Johnson.} Okay. All right.
- 2860 Mr. {Moniz.} Right.

- 2861 Mr. {Johnson.} Well, as you can imagine, I have some
- 2862 concerned constituents that have received warn notices
- 2863 recently, and only want to ensure that we don't have any work
- 2864 stoppages. Anything that I can do to help move this process
- 2865 along, I want you to know that I stand ready to help.
- 2866 Mr. {Moniz.} Thank you.
- 2867 Mr. {Johnson.} I thank you for your leadership on this
- 2868 issue. Not only does this program support jobs for my
- 2869 constituents, but, as we discussed, it is vitally important
- 2870 for our national security. And I look forward to working
- with you on it.
- 2872 Mr. {Moniz.} I would just add that again, we are
- 2873 committed to preserving the technology in the IP. The
- 2874 management structure, for obvious reasons, may be
- 2875 transitioning.
- 2876 Mr. {Johnson.} Sure.
- 2877 Mr. {Moniz.} Yeah.
- 2878 Mr. {Johnson.} Now, shifting gears just a little bit,
- 2879 going back to the LNG export issue. You and I have discussed
- 2880 LNG exports. I co-chair the LNG export working group here in
- 2881 the House. Some report--some press reports have indicated
- 2882 that there has been potentially some kind of deal struck
- 2883 between your Department and Senator Stabenow. You know, she
- 2884 was opposed to liquid natural gas exports. She was putting a

- 2885 hold on one of your Committee's nominees coming through the
- 2886 Senate. And but now she has said hey, I am now more
- 2887 comfortable with what the Department is doing. Has there
- 2888 been some kind of deal struck between you and Senator
- 2889 Stabenow that we need to know about?
- 2890 Mr. {Moniz.} No, we--um-hum--
- 2891 Mr. {Johnson.} Because quite honestly, Mr. Secretary,
- 2892 and I love the work that you are doing, you and I have a very
- 2893 different definition of expeditiously, especially with all of
- 2894 the opportunities for job creation and energy independence.
- 2895 Mr. {Moniz.} Um-hum.
- 2896 Mr. {Johnson.} I just--I still fail to understand why
- 2897 it is taking so long to get these permits approved.
- 2898 Mr. {Moniz.} First, let me say, Senator Stabenow, of
- 2899 course, is by no means the only member of Congress who is
- 2900 concerned about the ramp rate of LNG exports. No one to my
- 2901 knowledge is--well, almost no one at least is arguing against
- 2902 LNG exports. It is this whole question of pace and
- 2903 cumulative impacts as it might have in terms of domestic
- 2904 prices for consumers and--
- 2905 Mr. {Johnson.} So has there been any kind of deal made
- 2906 between--
- 2907 Mr. {Moniz.} No.
- 2908 Mr. {Johnson.} I see.

- 2909 Mr. {Moniz.} So we have had--with her and with others,
- 2910 we have had discussions about what our process is and what
- 2911 the role is for cumulative impacts on the economy.
- 2912 Mr. {Johnson.} Okay.
- 2913 Mr. {Moniz.} Yeah.
- 2914 Mr. {Johnson.} Thank you, Mr. Secretary. I yield back,
- 2915 Mr. Chairman. Thank you.
- 2916 Mr. {Whitfield.} Yes, sir. And I am going to have some
- 2917 concluding remarks that I want to make. Maybe there will be
- 2918 a question or two in there. And then if you want to respond
- 2919 to it, you are free to do so. And certainly, Mr. Rush, as
- 2920 well.
- 2921 But I just wanted to comment on your response to Cory
- 2922 Gardner's question about his legislation, H.R. 6, conjured up
- 2923 in my mind what I am getting ready to say. You answered him
- 2924 by saying, you know, that is a legislative decision about
- 2925 whether or not the Congress will pass this legislation or
- 2926 not. And part of the animosity that is developed in the
- 2927 Congress with the President of the United States particularly
- 2928 has related to climate change. And particularly, when he has
- 2929 emphatically made it very clear that if Congress does not act
- 2930 in a way that I want it to act, then I am going to do what I
- 2931 want to do anyway. And the point that I would make is that
- 2932 Congress did act, in my view. Congress did not pass the Cap

- 2933 and Trade Bill. It was a Democratic controlled Senate that
- 2934 did not pass the Cap and Trade Bill.
- 2935 The House, last week, passed legislation. That was the
- 2936 first time ever that Congress gave EPA the authority to
- 2937 regulate greenhouse gases, CO2 emissions. Now, I am not
- 2938 going to get into the court--Supreme Court decision. But
- 2939 this legislation passed Congress giving EPA the authority.
- 2940 And we cannot get the Administration to focus on it. The
- 2941 President said he would veto that Bill. So I take it from
- 2942 that that if we don't do precisely what he wants on global--
- 2943 on climate change, that, as he said, he will go it alone.
- 2944 And many people in his Administration have said the same
- 2945 thing.
- 2946 And so when I look at the--and he is doing that by
- 2947 executive order, by executive actions. And when I look at
- 2948 the budget here, electric delivery and energy reliability,
- 2949 180 million dollars. Renewable energy alone, 1.3 billion
- 2950 dollars. And then when you look at the original legislation
- 2951 establishing the Department of Energy, it says the mission is
- 2952 to promote the interest of consumers through the provision of
- 2953 an adequate and reliable supply of energy at the lowest
- 2954 reasonable cost. And so many agencies of the federal
- 2955 government are totally focused on climate change. That is
- 2956 why so much money is going into that, even though it is

- 2957 contrary to the original mission statute.
- 2958 And the bottom line of it turns out to be this, when the
- 2959 EPA issued that greenhouse gas regulation, which in effect
- 2960 makes it impossible to build a new coal plant in America--and
- 2961 I agree with you, Mr. Secretary, no one is getting ready to
- 2962 build a coal plant in America, because the natural gas prices
- 2963 are so low. But what if we find ourselves the way Europe has
- 2964 found themselves, the gas coming from Russia is so expensive
- 2965 that last year, Europe imported 53 percent of our coal
- 2966 exports, and they are building coal plants. So if our
- 2967 natural gas prices start going up, we don't have the option.
- 2968 And then next year, 2015, they are going to be coming
- 2969 out with a regulation on existing coal fired plants, in
- 2970 addition to the utility MAC, in addition to the new. So we
- 2971 have genuine concerns about our ability to compete in the
- 2972 global marketplace. And we are moving so fast. The
- 2973 President's pushing so hard. I agree with Professor
- 2974 Turlington over at George Washington University who said the
- 2975 President is becoming a government into himself. So I just
- 2976 want to make that comment. And you may not agree with me on
- 2977 this, Bobby.
- 2978 Mr. {Rush.} I certainly don't agree with that.
- 2979 Mr. {Whitfield.} But let me just conclude by saying
- 2980 thank you for being with us. We look forward to continued

- 2981 work this you on a lot of issues affecting our country. And
- 2982 we appreciate your being available all the time.
- 2983 Mr. {Moniz.} Thank you.
- 2984 Mr. {Rush.} Mr. Chairman, I just want to say, I don't
- 2985 agree with you on this. And I very rarely agree with you.
- 2986 So it is not out of the question that I don't agree with you
- 2987 right--at this present time. I think your characterization
- 2988 of the President is totally inadequate. And--so but we have
- 2989 had disagreements for a long time now. And I don't think
- 2990 either one of us is going to change our opinion about our
- 2991 President.
- 2992 Mr. Secretary, one area that DOE can have a direct
- 2993 impact in helping to increase minority engagement is in the
- 2994 17 publicly funded national research labs, and in areas of
- 2995 contracting and management and operations, technology
- 2996 transfers. I am finding that most of these labs are mostly
- 2997 failing in their outreach and partnerships with historically
- 2998 black colleges and universities, minority serving
- 2999 institutions, as well as minority contractors and
- 3000 entrepreneurial and in the whole are of minority engagement,
- 3001 they are willfully lacking in. I mean, almost
- 3002 heartbreakingly lacking you look at them--you look at the
- 3003 lineup and you visit these places and you see no diversity at
- 3004 all. And having seen diversity therein in decades, and some

3005 of them never had any diverse top level staffing and leadership. And I think that, as you indicated earlier, 3006 3007 maybe the problem is a lack of minorities in key leadership 3008 positions, most--at the labs and maybe even at the Department 3009 itself. What do you think are some of the obstacles that we 3010 are--that we must overcome, some of the prohibitions? And is 3011 your Department sufficiently diverse to--in the decision 3012 making process to allow for more diversity in leadership--not 3013 only in the Department but in these labs? I mean, these labs 3014 are just enormous public taxpayer dollars. And some of them 3015 have--don't even remotely reflect any attempt at diversity. 3016 And I am really concerned about that. So can you give me 3017 some idea about how you -- what you -- how you view the problem? 3018 And I know we have had this discussion many times, you know, 3019 but I want to just refresh the discussion. 3020 Mr. {Moniz.} The--first of all, I think it is important 3021 that it is clearly understood that the Secretary considers 3022 this a priority. And we are promulgating this. We have 3023 raised it with the lab directors. And they have responded 3024 enthusiastically. Now, we have to do something about it. 3025 But they--frankly, when I raised this at the laboratory 3026 policy counsel, the reaction of the lab directors was God, 3027 you are right. We just got -- we have to do this. So that is 3028 a good start. But that is only a start. Number two, we have just in the last month, by the way, including at Argonne, in your neck of the woods, appointed lab directors. In each case, we went through very carefully the nature of the search, its openness, et cetera. And, frankly, while the candidates—those appointed themselves did not increase the diversity, each one of the three made very, very strong

commitments to look at this.

- 3036 I think that what has been missing--and I am talking in 3037 the laboratory system. And the lab directors have responded 3038 very positively on this, is we need to--it is not that it is 3039 totally missing, but it is -- we are not up to snuff in terms 3040 of what I would call leadership development programs. 3041 it is not only for diverse candidates, but includes a focus 3042 on diversity of understanding--I think as many corporations 3043 do extremely well. They are--you are always looking to how 3044 you develop the leaders in the organization so that you have 3045 people who can come up. So that is a focus that we are going 3046 to advance, and we have started. But we have a long way to 3047 go.
- 3048 Mr. {Rush.} Mr. Secretary, I really look forward to 3049 working with you and see--as you well know, I am very passionate about this issue. I--and so I look forward to 3051 working with you on this issue.
- 3052 Mr. {Moniz.} Great.

3035

- 3053 Mr. {Rush.} And, Mr. Chairman, I look forward to us
- 3054 having a discussion in terms of having a hearing on these and
- 3055 other matters.
- Mr. {Whitfield.} Yeah. Yeah, and we are going to be
- 3057 setting down the next couple of days on your legislation,
- 3058 because our staff has been working together. But--well, that
- 3059 concludes today's hearing. Mr. Secretary, thank you once
- 3060 again. And thank you for your staff and all of your time and
- 3061 availability.
- 3062 Mr. {Moniz.} Thank you.
- 3063 Mr. {Whitfield.} And the record will remain open for 10
- 3064 days. And with that, the hearing is adjourned.
- 3065 [Whereupon, at 12:55 p.m., the subcommittee was
- 3066 adjourned.]